

Description of Data Elements

HCUP State Inpatient Databases (SID)

Volume 3 - Data Elements Beginning with letters F-M

This document contains cumulative descriptions of data elements across all HCUP Central Distributor states and years of HCUP data from 1988 to the current data year. Please refer to the separate documents on the Availability of Data Elements (1995-1997) and (1998-2003) for specific information on which states and data elements are included in each year of the SID.

Not all data elements are uniformly coded or available across all the states. Please check the "State Specific Notes" section for each data element before analysis.

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FEMALE - Indicator of sex

General Notes

The sex of the patient (FEMALE) is provided by the data source. All non-male, non-female (e.g., "other") values are set to missing (.).

If FEMALE is inconsistent with diagnoses (EDX03) or procedures (EPR03), FEMALE is set to inconsistent (.C).

In HCUP databases before 1998, this data element is called SEX.

Uniform Values

Variable	Description	Value	Value Description
FEMALE	Indicator of sex	0	Male
		1	Female
		.	Missing
		.A	Invalid
		.C	Inconsistent, EDX03, EPR03

State Specific Notes

Colorado

According to the documentation available from the source, "Other/Unknown" includes patients undergoing sex changes, undetermined sex, live births with congenital abnormalities, and patients whose sex was unavailable from any source document. The source value for "Other/Unknown" was recoded to missing (.), during HCUP processing of 1988-1992 discharges.

Beginning in 1993, "Other/Unknown" was recoded to invalid (.A) during HCUP processing.

Utah

The source value "E" for "Encrypted patient gender (confidential data)" is recoded to missing (FEMALE = .).

Utah encrypts the patient gender for the following two conditions:

1. Patients with the Major Diagnosis Code of "Human Immunodeficiency Virus Infection" (value 25) and
2. Diagnosis Related Groups "Alcohol/Drug Abuse or Dependence" (values 433-437).

HISPANIC_X - Hispanic ethnicity, as received from the source

General Notes

HISPANIC_X retains information on the Hispanic ethnicity as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Two HCUP data elements contain other information about the race of the patient:

- RACE_X retains information on the race of the patient as provided by the data source.
- RACE contains uniformly coded information about the race and ethnicity of the patient. The data element RACE should be used when analyzing race across data sources.

Uniform Values

Variable	Description	Value	Value Description
HISPANIC_X	Hispanic ethnicity, as received from the source	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Information on State specific coding for this data element is available under the "State Specific Notes" section for the data element RACE.

HOSPID - HCUP hospital identification number

General Notes

There are up to three different types of hospital identifiers included in the HCUP databases.

- The data source's own number scheme for identifying hospitals and facilities (DSHOSPID),
- The hospital identifier used by the American Hospital Association (AHAID and IDNUMBER), and
- A unique HCUP hospital identifier (HOSPID).

The hospital entity as defined by the data source may differ from the hospital entity as defined by the AHA. For example, the data source treats two separate facilities as two hospitals, while the AHA Annual Survey treats the two facilities as a single hospital, or vice versa. For consistency across states, HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals. During HCUP data processing, the data source's identification of the hospital is reconciled with the identification of the hospital in the AHA Annual Survey of Hospitals. For detailed information about this linking process, see the special report on HCUP Hospital Identifiers.

The HCUP hospital identifier (HOSPID) is based on the AHA hospital identifier and is defined as:

- SSnnn, where SS = State FIPS Code, and
- nnn = hospital number unique to state.

HOSPID is missing for some hospitals because an AHA hospital identifier cannot be determined. Hospitals may not be registered with the AHA or the source-provided information cannot be matched to the AHA.

The data element HOSPID is available in the Hospital file.

Uniform Values			
Variable	Description	Value	Value Description
HOSPID	HCUP hospital identification number	5(n)	HCUP hospital identification number
		Blank	Missing

State Specific Notes

None

HOSPST - Hospital State postal code

General Notes

HOSPST indicates the hospital's two-character state postal code (e.g., "CA" for California).

Uniform Values

Variable	Description	Value	Value Description
HOSPST	Hospital State postal code	aa	Hospital State postal code

State Specific Notes

None

HOSPSTCO - Hospital modified FIPS state/county code

General Notes

HOSPSTCO indicates the five-digit state and county modified FIPS code listed for that hospital in the American Hospital Association Annual Survey of Hospitals. Each hospital has only one unique state/county code. If multiple hospital units are in different counties, HOSPSTCO is the county code of the primary facility (as indicated by American Hospital Association Annual Survey information).

HOSPSTCO can be used to link HCUP data to any other data set that uses the modified FIPS county code, such as the Area Resource File and the American Hospital Association Annual Survey of Hospitals. In these modified FIPS county codes, Baltimore City is included in Baltimore County, St. Louis City in St. Louis County, and the independent cities of Virginia in the contiguous counties, Kalawao county, Hawaii is included in Maui County. The four Alaska Judicial Divisions are used as counties.

HOSPSTCO is missing for some hospitals because an AHA hospital identifier cannot be determined. Hospitals may not be registered with the AHA or the source-provided information cannot be matched to the AHA.

The data element HOSPSTCO is available in the Hospital file.

Uniform Values

Variable	Description	Value	Value Description
HOSPSTCO	Hospital modified FIPS state/county code	5(n)	Hospital modified FIPS State/County code
		Blank	Missing

State Specific Notes

None

HOSPITALUNIT - Indicator that patient was discharged from a special unit within an acute care hospital (reported by source)

General Notes

HospitalUnit (HospitalUnit) is retained as reported by data source with two exceptions. Any source-specific value for "unknown" is recoded to missing (.), and invalid characters such as negative values are set to invalid (.A).

Uniform Values

Variable	Description	Value	Value Description
HOSPITALUNIT	Indicator that patient was discharged from a special unit within an acute care hospital (reported by source)	n(n)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Maryland

In Maryland, HospitalUnit is coded as follows:

Value	Description
1	Medicine
2	Surgery
3	Obstetrics
4	Newborn
5	Pediatric
6	Psychiatric

7	Other
8	Rehabilitation
.	Missing
.A	Invalid

IDNUMBER - Modified AHA hospital identifier

General Notes

There are up to three different types of hospital identifiers included in the HCUP databases.

- The data source's own number scheme for identifying hospitals and facilities (DSHOSPID),
- The hospital identifier used by the American Hospital Association (AHAID and IDNUMBER), and
- A unique HCUP hospital identifier (HOSPID).

The hospital entity as defined by the data source may differ from the hospital entity as defined by the AHA. For example, the data source treats two separate facilities as two hospitals, while the AHA Annual Survey treats the two facilities as a single hospital, or vice versa. For consistency across states, HCUP defines hospitals in accordance with the American Hospital Association Annual Survey of Hospitals. During HCUP data processing, the data source's identification of the hospital is reconciled with the identification of the hospital in the AHA Annual Survey of Hospitals. For detailed information about this linking process, see the special report on HCUP Hospital Identifiers.

IDNUMBER contains the last 6 digits of the original 7-digit AHA hospital identifier because the leading "6" has been removed. The data element AHAID retains the original 7-digit value in the AHA Annual Survey of Hospitals data files. These files contain information about hospital characteristics and are available for purchase through the AHA.

IDNUMBER is missing for some hospitals because an AHA identifier cannot be determined. Hospitals may not be registered with the AHA or the source-provided information cannot be linked to the AHA.

The data element IDNUMBER is available in the Hospital file.

Uniform Values			
Variable	Description	Value	Value Description
IDNUMBER	Modified AHA hospital identifier	6(n)	AHA Hospital identifier without a leading 6
		Blank	Missing

State Specific Notes

None

INTENSIVECARE - Indicator of type of intensive care received by patient

General Notes

IntensiveCode (IntensiveCode_) is retained as reported by data source with two exceptions. Any source-specific value for "unknown" is recoded to missing (.), and invalid characters such as negative values are set to invalid (.A).

Uniform Values

Variable	Description	Value	Value Description
INTENSIVECARE	Indicator of type of intensive care received by patient	n(n)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Nevada

In Nevada, IntensiveCare is coded as:

Value	Description
0	No Intensive Care
1	Neonatal ICU
2	Surgical/Medical
3	Pediatric
4	Psychiatric
5	Burn Care
6	Trauma
7	General/Post ICU
8	Heart Transplant
9	General / Myocardial Infarction / Pulmonary Care/Post CCU/Other

	Coronary Care
.	Missing
.A	Invalid

KEY - Unique record identifier

General Notes

KEY contains a unique record identifier. Beginning in the 1998 data, all HCUP databases are sorted by KEY.

KEY can be used to link within a HCUP database, such as linking records in the Core and Charges files in the SID.

KEY can be used to link across HCUP databases within a data type, i.e., link records in the SID to records in the NIS.

KEY is a unique record identifier and not a person identifier. KEY cannot be used to link records between HCUP inpatient and ambulatory surgery files.

KEY replaces the database-specific record identifiers used in the 1988-1997 HCUP databases (SEQ, SEQ_SID, and SEQ_ASD).

Uniform Values

Variable	Description	Value	Value Description
KEY	Unique record identifier	14(n)	Unique record identifier

State Specific Notes

None

LEVELCARE - Level of patient care, as received from source

General Notes

The level of patient care (LEVELCARE) is retained as provided by the data source. The original values are not recorded unto uniform HCUP values and are source-specific.

Uniform Values

Variable	Description	Value	Value Description
LEVELCARE	Level of patient care, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

California

Prior to 1998, the variable LEVELCARE was not included in the HCUP databases. Information on the level of care was contained in the first digit of the California hospital identifier (DSHOSPID).

The values of LEVELCARE are defined as follows:

0=	Type of unit unknown
1=	General acute care
2=	Not a valid code
3=	Skilled nursing and intermediate care (long term care)
4=	Psychiatric care
5=	Alcohol/chemical dependency recovery treatment
6=	Acute physical medicine rehabilitation care.

California hospitals were required to assign type of care codes to individual records for certain discharges.

These discharges included:

- general acute care (value = 1),
- skilled nursing and intermediate care (value = 3), and
- rehabilitation care (value = 6).

For discharges from facilities licensed as psychiatric care (value = 4) or alcohol/chemical dependency recovery treatment (value = 5), California assigns the type of care code to all discharges from the facility.

LOS - Length of stay, cleaned

General Notes

Length of stay (LOS) is calculated by subtracting the admission date (ADATE) from the discharge date (DDATE). Same-day stays are therefore coded as 0. Leave days are not subtracted. Before edit checks are performed, LOS and LOS_X have the same value. If LOS is set to inconsistent (.C), the value of LOS_X is retained.

LOS is not equal to the calculated value in the following cases:

- LOS is set to the supplied length of stay if the length of stay cannot be calculated (ADATE and/or DDATE is missing or invalid). Note: If the supplied length of stay codes same-day stays as 1 or subtracts leave days, then the supplied length of stay is NOT used.
- LOS is missing (.) if the length of stay cannot be calculated and the supplied length of stay is missing.
- LOS is invalid (.A) if
 - it is greater than the maximum value allowed during HCUP processing (the maximum allowed in the 1988-1997 data is 32,767; the maximum allowed beginning in the 1998 data is 20 years)
 - - or -
 - the length of stay cannot be calculated and the supplied length of stay is nonnumeric.
- An invalid calculated LOS is not replaced by the supplied length of stay.
- If the data source does not supply either admission date (ADATE) and discharge date (DDATE), or length of stay, then beginning in the 1998 data LOS is not present on the HCUP files. In the 1988-1997 data, LOS is retained on the HCUP files and is set to unavailable from source (.B).
- LOS is inconsistent (.C) if
 - LOS is negative (ELOS03 beginning in the 1998 data and ED011 in the 1988-1997 data),
 - Excessively long (ELOS04 beginning in the 1998 data and ED601 in the 1988-1997 data), or
 - Charges per day are unjustifiably low (ED911) or high (ED921).

Edit checks ED911 and ED921 are only performed on the 1988-1997 data. No charge per day edit checks are performed on the HCUP data beginning in the 1998 data.

Uniform Values			
Variable	Description	Value	Value Description
LOS	Length of stay, cleaned	0 - 365 (for HCUP inpatient data), 0-3 (for HCUP outpatient data)	Days (In the 1988-1997 inpatient data, LOS can be greater than 365 days)
		.	Missing
		.A	Invalid
		.B	Unavailable from source (coded in 1988-1997 data only)
		.C	Inconsistent: beginning with 1998 data, ELOS03, ELOS04; in 1988-1997 data, ED011, ED601, ED911n, ED921

State Specific Notes

Arizona

Beginning in 1995, the source reports same-day stays as zero days so the supplied length of stay was used to assign LOS when length of stay could not be calculated from dates. Prior to 1995, the reported length of stay was not used when LOS could not be calculated because Arizona coded same-day stays with a value of 1 and subtracted days of absence from LOS.

Colorado

The reported length of stay was not used when LOS could not be calculated because Colorado:

- coded same-day stays with the value 1 and
- subtracted days of absence

Florida

Beginning in 2000, the supplied length of stay was used to assign LOS and LOS_X because Florida did not provide the admission and discharge date necessary for calculating length of stay. The supplied length of stay was coded according to the HCUP standard that assigns a length of stay of zero (0) to same day stays.

In 1997-1999, the coding of LOS and LOS_X is inconsistent with the coding of length of stay in other states. Florida provided the reported length of stay but not the admission and discharge date necessary for calculating LOS. Florida codes same-day stays as LOS=1; the HCUP standard coding of same-day stays is LOS=0. Usually 2% of a states' discharges are same-day stays.

Prior to 1997, the reported length of stay was not used when LOS could not be calculated because Florida:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Iowa

The reported length of stay was not used when LOS could not be calculated because Iowa coded same-day stays with a value of 1.

Kentucky

The reported length of stay was not used when LOS could not be calculated because Kentucky coded same-day stays with a value of 1.

Maine

The supplied length of stay was not used when length of stay could not be calculated because Maine coded same-day stays with a value of 1.

Massachusetts

The supplied length of stay was not used when LOS could not be calculated because Massachusetts:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Michigan

Prior to 2001, LOS could not be calculated because Michigan did not report admission or discharge dates. Beginning with the 2001 data, Michigan provided complete dates and LOS could be calculated. In 2003, only the calculated length of stay could be used to assign LOS because Michigan codes same day stays with a value of 1.

Caution: Prior to 2001, if LOS = 365, then the stay may be longer than a year. Michigan uses the value 365 for stays that are greater than equal 364 days.

Nebraska

The reported length of stay was not used when LOS could not be calculated because Nebraska coded same-day stays with the value 1.

Nevada

Only the calculated length of stay could be used to assign LOS because Nevada codes same day stays with a value of 1.

New York

The assignment of LOS and LOS_X varies by year in New York:

- Beginning in 2000 data, the length of stay (LOS and LOS_X) in New York was calculated from the admission and discharge dates. Because New York masked the dates on AIDS/HIV* records, the calculated length of stay was missing. During HCUP processing, other information provided by New York was used to determine LOS and LOS_X when the calculated length of stay was missing. The length of stay provided by New York (which did not include leave days), total leave days, and a flag that indicates a same day stay were used to determine a length of stay that was consistent with the coding of length of stay on other HCUP records.
- In the 1998-1999 data purchased from NTIS, the length of stay (LOS and LOS_X) in New York was calculated from the admission and discharge dates. Because New York masked the admission and discharge dates on AIDS/HIV* records, LOS and LOS_X was missing (.) on these discharges. An updated version of the 1998-1999 data is available through the HCUP Central Distributor with LOS and LOS_X coded on the New York AIDS/HIV* records. The updated version has LOS and LOS_X calculated using the method described for the 2000 data.

In the 1998-1999 data purchased from HCUP Central Distributor, the length of stay (LOS and LOS_X) in New York was calculated using the method described for the 2000 data.

- In the 1988-1997 HCUP data, LOS and LOS_X could not be calculated from dates because New York did not report full admission and discharge dates. During HCUP processing, the length of stay provided by New York was used to assign LOS and LOS_X. The length of stay provided by New York was adjusted during HCUP processing to be consistent with the coding of length of stay in other states.

*New York identifies AIDS/HIV records by ICD-9-CM diagnosis code or DRG:

- An admitting, principal, or secondary diagnosis of "042" "043" "044" "7958" "27910", "27919", "2793", "1363", "79571", "07951", "07952", "07953" or "V08".
- A DRG of 488 "HIV with Extensive Operating Room Procedure", 489 "HIV with Major related condition", or 490 "HIV with or without Other Related Condition".

Please note that the admitting diagnosis is not retained in the HCUP databases.

North Carolina

The reported length of stay was not used when LOS could not be calculated because North Carolina coded same-day stays with the value 1.

Oregon

Prior to 1994, the reported length of stay was assigned to LOS if dates were not available. However, the coding of same day stay varies: some Oregon hospitals report discharges on the day of admission as one day stay (LOS=1), in addition to reporting same day stay as zero days (LOS=0).

Beginning in 1994, the reported length of stay was not used when LOS could not be calculated from dates because Oregon coded all same-day stays as one day (LOS=1).

South Carolina

The reported length of stay was not used when LOS could not be calculated because South Carolina coded same-day stays with a value of 1.

Utah

The reported length of stay was not used when LOS could not be calculated because Utah coded same-day stays with a value of 1.

Washington

The reported length of stay was not used when LOS could not be calculated because Washington:

- coded same-day stays with the value 1 and
- subtracted days of absence.

West Virginia

Beginning in 2001, West Virginia provides LOS.

Prior to 2001, only the calculated length of stay was used to assign LOS because West Virginia did not provide the reported length of stay.

Wisconsin

Only the calculated length of stay was used to assign LOS and LOS_X. For 1988-1994, the reported length of stay was not used when LOS could not be calculated because Wisconsin subtracted leave days and coded length of stay greater than 999 days as 999 days. Beginning with 1995, length of stay was not supplied.

LOS_X - Length of stay, uncleaned

General Notes

Length of stay (LOS_X) is calculated by subtracting the admission date (ADATE) from the discharge date (DDATE). Same-day stays are therefore coded as 0. Leave days are not subtracted. Before edit checks are performed, LOS and LOS_X have the same value. If LOS is set to inconsistent (.C), the value of LOS_X is retained. LOS_X may contain negative or excessively large values.

LOS_X is not equal to the calculated value in the following cases:

- LOS_X is set to the supplied length of stay if the length of stay cannot be calculated (ADATE and/or DDATE is missing or invalid). Note: If the supplied length of stay codes same-day stays as 1 or subtracts leave days, then the supplied length of stay is NOT used.
- LOS_X is missing (.) if the length of stay cannot be calculated and the supplied length of stay is missing.
- LOS_X is invalid (.A) if
 - it is greater than the maximum value allowed during HCUP processing (the maximum allowed in the 1988-1997 data is 32,767; the maximum allowed beginning in the 1998 data is 20 years)
 - - or -
 - the length of stay cannot be calculated and the supplied length of stay is nonnumeric.
- An invalid calculated LOS_X is not replaced by the supplied length of stay.
- If the data source does not supply either admission date (ADATE) and discharge date (DDATE), or length of stay, then beginning in the 1998 data LOS_X is not present on the HCUP files. In the 1988-1997 data, LOS_X is retained on the HCUP files and is set to unavailable from source (.B).

Uniform Values

Variable	Description	Value	Value Description
LOS_X	Length of stay, uncleaned	+/- 7,305	Days (In the 1988-1997 inpatient data, LOS_X can be greater than 7,305 days)
		.	Missing
		.A	Invalid (nonnumeric or out of range)
		.B	Unavailable from source (coded in 1988-1997 data only)

State Specific Notes

Arizona

Beginning in 1995, the source reports same-day stays as zero days so the supplied length of stay was used to assign LOS_X when length of stay could not be calculated from dates. Prior to 1995, the reported length of stay was not used when LOS_X could not be calculated because Arizona coded same-day stays with a value of 1 and subtracted days of absence from LOS.

Colorado

The reported length of stay was not used when LOS_X could not be calculated because Colorado:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Florida

Beginning in 2000, the supplied length of stay was used to assign LOS and LOS_X because Florida did not provide the admission and discharge date necessary for calculating length of stay. The supplied length of stay was coded according to the HCUP standard that assigns a length of stay of zero (0) to same day stays.

In 1997-1999, the coding of LOS and LOS_X is inconsistent with the coding of length of stay in other states. Florida provided the reported length of stay but not the admission and discharge date necessary for calculating LOS_X. Florida codes same-day stays as LOS_X=1; the HCUP standard coding of same-day stays is LOS_X=0. Usually 2% of a states' discharges are same-day stays.

Prior to 1997, the supplied length of stay was not used when length of stay could not be calculated because Florida:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Iowa

The reported length of stay was not used when length of stay could not be calculated because Iowa coded same-day stays with a value of 1.

Kentucky

The reported length of stay was not used when LOS_X could not be calculated because Kentucky coded same-day stays with a value of 1.

Maine

The supplied length of stay was not used when length of stay could not be calculated because Maine coded same-day stays with a value of 1.

Massachusetts

The supplied length of stay was not used when LOS could not be calculated because Massachusetts:

- coded same-day stays with the value 1 and
- subtracted days of absence.

Michigan

Length of stay could not be calculated from dates because Michigan did not report admission or discharge dates. During HCUP processing, only the reported length of stay could be used to assign LOS.

Caution: If LOS_X = 365, then the stay may be longer than a year. Michigan uses the value 365 for stays that are greater than equal 364 days.

Nebraska

The reported length of stay was not used when LOS_X could not be calculated because Nebraska coded same-day stays with the value 1.

Nevada

Only the calculated length of stay could be used to assign LOS_X because Nevada codes same day stays with a value of 1.

New York

The assignment of LOS and LOS_X varies by year in New York:

- Beginning in 2000 data, the length of stay (LOS and LOS_X) in New York was calculated from the admission and discharge dates. Because New York masked the dates on AIDS/HIV* records, the calculated length of stay was missing. During HCUP processing, other information provided by New York was used to determine LOS and LOS_X when the calculated length of stay was missing. The

length of stay provided by New York (which did not include leave days), total leave days, and a flag that indicates a same day stay were used to determine a length of stay that was consistent with the coding of length of stay on other HCUP records.

- In the 1998-1999 data purchased from NTIS, the length of stay (LOS and LOS_X) in New York was calculated from the admission and discharge dates. Because New York masked the admission and discharge dates on AIDS/HIV* records, LOS and LOS_X was missing (.) on these discharges. An updated version of the 1998-1999 data is available through the HCUP Central Distributor with LOS and LOS_X coded on the New York AIDS/HIV* records. The updated version has LOS and LOS_X calculated using the method described for the 2000 data.

In the 1998-1999 data purchased from HCUP Central Distributor, the length of stay (LOS and LOS_X) in New York was calculated using the method described for the 2000 data.

- In the 1988-1997 HCUP data, LOS and LOS_X could not be calculated from dates because New York did not report full admission and discharge dates. During HCUP processing, the length of stay provided by New York was used to assign LOS and LOS_X. The length of stay provided by New York was adjusted during HCUP processing to be consistent with the coding of length of stay in other states.

*New York identifies AIDS/HIV records by ICD-9-CM diagnosis code or DRG:

- An admitting, principal, or secondary diagnosis of "042" "043" "044" "7958" "27910", "27919", "2793", "1363", "79571", "07951", "07952", "07953" or "V08".
- A DRG of 488 "HIV with Extensive Operating Room Procedure", 489 "HIV with Major related condition", or 490 "HIV with or without Other Related Condition".

Please note that the admitting diagnosis is not retained in the HCUP databases.

North Carolina

The reported length of stay was not used when LOS_X could not be calculated because North Carolina coded same-day stays with the value 1.

Oregon

Prior to 1994, the reported length of stay was assigned to LOS_X if dates were not available. However, the coding of same day stay varies: some Oregon hospitals report discharges on the day of admission as one day stay (LOS_X=1), in addition to reporting same day stays as zero days (LOS_X=0).

Beginning in 1994, the reported length of stay was not used when length of stay could not be calculated from dates because Oregon coded all same-day stays as one day (LOS_X=1).

South Carolina

The reported length of stay was not used when LOS_X could not be calculated because South Carolina coded same-day stays with a value of 1.

Utah

The reported length of stay was not used when LOS_X could not be calculated because Utah coded same-day stays with a value of 1.

Washington

The reported length of stay was not used when length of stay could not be calculated because Washington:

- coded same-day stays with the value 1 and
- subtracted days of absence.

West Virginia

Beginning in 2001, West Virginia provides LOS_X.

Prior to 2001, only the calculated length of stay was used to assign LOS_X because West Virginia did not provide the reported length of stay.

Wisconsin

Only the calculated length of stay was used to assign LOS and LOS_X. For 1988-1994, the reported length of stay was not used when LOS could not be calculated because Wisconsin subtracted leave days and coded length of stay greater than 999 days as 999 days. Beginning with 1995, length of stay was not supplied.

MARITALSTATUS - Marital status of patient

General Notes

Marital status at the time of admission or outpatient service (MaritalStatus) is retained as provided by the data source. Undocumented source data are set to invalid (A). No edit checks are performed on this data element during HCUP processing.

Uniform Values

Variable	Description	Value	Value Description
MARITALSTATUS	Marital status of patient	M	Married
		S	Single
		D	Divorced
		X	Legally Separated
		P	Life Partner
		W	Widowed
		Blank	Unknown, Missing
		A	Invalid

State Specific Notes

None

MDBOARD1 - Physician 1 licensing board (as received from source)

General Notes

Information on the licensing board for Physician 1 (MDBOARD1) is retained as provided by the data source. No edit checks are performed on this data element during HCUP processing.

Beginning in 2001, this data element is associated with the synthetic physician identifier stored in MDNUM1_S.

Uniform Values

Variable	Description	Value	Value Description
MDBOARD1	Physician 1 licensing board (as received from source)	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Arizona

In Arizona, the licensing board for the attending physician (MDBOARD1) is coded as follows. Any other codes are undefined.

Source Value	Description
Blank	Missing
1	Medical Examiners
2	Dental Examiners
3	Podiatry Examiners
4	Osteopathic Examiners
5	Nursing
9	Other

MDBOARD2 - Physician 2 licensing board (as received from source)

General Notes

Information on the licensing board for Physician 2 (MDBOARD2) is retained as provided by the data source. No edit checks are performed on this data element during HCUP processing.

Beginning in 2001, this data element is associated with the synthetic physician identifier stored in MDNUM2_S.

Uniform Values

Variable	Description	Value	Value Description
MDBOARD2	Physician 2 licensing board (as received from source)	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Arizona

In Arizona, the licensing board for the attending physician (MDBOARD2) is coded as follows. Any other codes are undefined.

Source Value	Description
Blank	Missing
1	Medical Examiners
2	Dental Examiners
3	Podiatry Examiners
4	Osteopathic Examiners
5	Nursing
9	Other

MDC - MDC in effect on discharge date

General Notes

The Major Diagnostic Category appropriate for the date of discharge (MDC) is assigned by the HCFA DRG grouper during HCUP processing. Refer to the notes for the data element DRG for complete details.

Labels

Labels for the MDCs are provided as an ASCII file in HCUP Tools: Labels and Formats.

Uniform Values

Variable	Description	Value	Value Description
MDC	MDC in effect on discharge date	nn	MDC value

State Specific Notes

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG and MDC assigned because of a error in HCUP processing. The DRG should have been 470; and the MDC should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following numbers of records are affected:

- 1 record in 1989 and
- 1 record in 1990.

No other years are affected.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following numbers of records are affected:

- for 1988, 34 records;
- for 1989, 30 records;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG and MDC were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following numbers of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following number of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG and MDC were processed correctly.

MDC10 - MDC, Version 10

General Notes

The Major Diagnostic Category, Version 10 (MDC10) is assigned by the HCFA DRG Grouper algorithm during HCUP processing. Refer to the notes for the data element DRG10 for complete details. MDC10 is available on the HCUP databases from 1988 to 1999.

Labels

Labels for the MDCs are provided as an ASCII file in HCUP Tools: Labels and Formats.

Uniform Values

Variable	Description	Value	Value Description
MDC10	MDC, Version 10	nn	MDC value

State Specific Notes

California

One discharge in 1991 with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) had the incorrect DRG10 and MDC10 assigned because of a error in HCUP processing. The DRG10 should have been 470; and the MDC10 should have been equal to 0.

No other years are affected.

Massachusetts

Some 1989-1990 discharges with a missing principal diagnosis code (DX1=" ") and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following numbers of records are affected:

- 1 record in 1989 and

- 1 record in 1990.

No other years are affected.

Some 1988-1991 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following numbers of records are affected:

- for 1988, 34 records;
- for 1989, 30 records;
- for 1990, 44 records; and
- for 1991, 33 records.

Beginning with 1992 discharges, DRG10 and MDC10 were processed correctly.

Washington

Some 1988-1992 discharges with an invalid principal diagnosis code (DXV1 = 1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG and MDC assigned because of an error in HCUP processing. The DRG should be 470; and the MDC should be equal to 0. The following numbers of records are affected:

- for 1988, 184 records;
- for 1989, 68 records;
- for 1990, 13 records;
- for 1991, 1 record; and
- for 1992, 1 record.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

Wisconsin

According to source documentation, the principal and secondary procedures for one hospital (DSHOSPID="056" and HOSPID=55155) are incorrect in the fourth quarter of 1997. System problems at the hospital caused the last procedure coded on the medical record to be stored as the principal procedure. No secondary procedures were recorded. This affects the DRG, DRG10, MDC, and MDC10 assignment.

Some 1989-1992 discharges with an invalid principal diagnosis code (DXV1=1) and at least one non-missing secondary diagnosis code (DX2, etc.) have the incorrect DRG10 and MDC10 assigned because of an error in HCUP processing. The DRG10 should be 470; and the MDC10 should be equal to 0. The following numbers of records are affected:

- for 1989, 23 records;
- for 1990, 4 records;
- for 1991, 1 record; and
- for 1992, 10 records.

Beginning with 1993 discharges, DRG10 and MDC10 were processed correctly.

MDC18 - MDC, Version 18

General Notes

The Major Diagnostic Category, Version 18 (MDC18) is assigned by the HCFA DRG Grouper algorithm during HCUP processing. Refer to the notes for the data element DRG18 for complete details. MDC18 is available on the HCUP databases beginning in 1998.

Labels

Labels for the MDCs are provided as an ASCII file in HCUP Tools: Labels and Formats.

Uniform Values

Variable	Description	Value	Value Description
MDC18	MDC, Version 18	nn	MDC value

State Specific Notes

None

MDID_S - Synthetic attending physician number

General Notes

For HCUP data from 2001 to 2002, this data element is called MDNUM1_S. Beginning in 2003, this data element is called MDNUM1_R.

MDID_S contains a fixed-key (one-to-one) encryption of the supplied attending physician number (MDID), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,; '*@" are retained in the encrypted value, but not in the same location.
- Leading zeros are encrypted so that the two original physician identifiers "000A6" and "A6" are distinctly different.
- When the original attending physician and primary surgeon identifiers are the same, the synthetic identifiers, MDID_S and SURGID_S, are the same.
- When the MDID in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, MDID_S is the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier MDID_S refers to individual physicians or to groups. If the attending physician numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether MDID_S refers to individual physicians or to groups.

Beginning in the 1993 data, supplied physician identifiers were checked for null characters. If null characters were found, they were replaced by blanks before the identifier was encrypted. Since this conversion was not done in prior years of HCUP data, the encrypted physician identifiers from 1993 on may not match those in earlier years. However, null characters are rarely included.

Uniform Values			
Variable	Description	Value	Value Description
MDID_S	Synthetic attending physician number	16(a)	Synthetic physician identifier
		Blank	Missing

State Specific Notes

Arizona

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal attending physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or other health care practitioner. Information was not available about the prevalence of this practice.
- Some hospitals use one attending physician identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.

The attending physician identification number includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are unspecified.

Colorado

The attending physician identification number (MDID_S) may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Also, some hospitals appear to pad the Professional State License Number (a 5-digit code). Information was not available from the data source about the prevalence of these practices.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available from the data source about the prevalence of this practice.

Florida

Florida reports state license numbers for the attending physician identifiers. During HCUP processing, physician identifiers were encrypted (MDID_S).

Iowa

Iowa reports Universal Physician Identification Numbers (UPINs) as attending physician identification numbers.

Kentucky

The encrypted attending physician identifier (MDID_S) may not accurately track physicians across hospitals. Kentucky collects two different types of physician identifiers, Universal Physician Identification Numbers (UPINs) and state license numbers.

Maryland

Maryland reports a state license number assigned by the Medical Chirurgical Faculty of Maryland (MED CHI) for the attending physician. Source documentation describes strict assignment and verification rules for this field.

Michigan

Michigan reports hospital-specific physician identifiers for attending physicians. Coding of physician identifiers are not consistent across hospitals. During HCUP processing, physician identifiers were encrypted (MDID_S).

New Jersey

The coding of attending physician identification number (MDID_S) varies across years:

Year	Physician Identifier
1988-93	New Jersey state license numbers
1994-95	Universal Physician Identification Numbers (UPINs)
Beginning in 1996	New Jersey state license numbers.

New York

New York reports state license numbers as physician identifiers. Source documentation indicates that if the attending physician did not possess a valid New York state license number, the license number of the Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwives, and other licensed health care professionals may be included. It is impossible to identify the different types of providers in the HCUP data.

Source physician identifiers are encrypted during HCUP processing.

Beginning in the 1998 data, physician identifiers are missing (" ") on discharges with an indication of an induced abortion. New York identifies an indication of induced abortion by ICD-9-CM diagnosis or procedure code:

- An admitting, principal, or secondary diagnosis of "6350" through "6399", or "7796".
- A principal or secondary procedure of "690", "695", "696", "6993", "738", "7491", "750", "751", or "9649".

Please note that the admitting diagnosis is not retained in the HCUP databases.

North Carolina

North Carolina provides the Universal Physician Identification Numbers (UPINs) for the attending physician. During HCUP processing, this identifier is encrypted.

Washington

The Washington attending physician identifiers may not accurately track physicians across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers. During HCUP processing, physician identifiers were re-encrypted (MDID_S).

West Virginia

The attending physician identifier (MDID_S) does not accurately track physicians across patients and hospitals. West Virginia collects different types of physician identifiers depending on the payer:

- The Universal Physician Identification Numbers (UPINs) are coded on Medicare patients.
- A West Virginia Medicaid physician identifier is coded on Medicaid patients. The same physician treating two different Medicaid patients can have two different physician identifiers. One identifier is used for new Medicaid patients; the other identifier is used for established Medicaid patients.
- The physician's state license number which starts with "WV" is coded on most commercial patients.

Some hospitals use their own physician identifiers and do not provide the UPIN, Medicaid and state license numbers.

MDNUM1_R - Physician 1 number (re-identified)

General Notes

HCUP encrypted physician identifiers are referred to by different names in the HCUP data across years.

Year	Variable
1988-2000	MDID_S
2001-2002	MDNUM1_S
Beginning with 2003	MDNUM1_R

MDNUM1_R is specific to physicians. If the physician identifier is based on a state license number or Universal Physician Identification Number (UPIN), then MDNUM1_R can be used to track a physician across hospitals. If the physician identifier is based on hospital-specific identifiers, then it can only be used to track physicians within a hospital. Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier refers to individual physicians or to groups. Refer to state-specific notes for more information about the type of physician identifiers provided by each state.

Because of a change in the algorithm for creating a masked physician number, physicians cannot be tracked from before 2003 to after 2003. In HCUP data prior to 2003, a synthetic physician number (MDNUM1_S prior to 2003 and MDID_S prior to 2001), created using fixed-key encryption, was available. Starting in data year 2003, a reidentification number (MDNUM1_R) was used. MDNUM1_R includes an arbitrarily chosen, identifying number that is unique to the physician identifier provided to HCUP.

Uniform Values

Variable	Description	Value	Value Description
MDNUM1_R	Physician 1 number (re-identified)	9(n)	Physician identifier
		.	Missing

State Specific Notes

Arizona

In Arizona two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Physician that performed the primary procedure is provided in MDNUM2_R.

Physician identification numbers may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or other health care practitioner. Information was not available about the prevalence of this practice.
- Some hospitals use one physician identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.

The physician identification number includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are unspecified. The provided physician identifiers are encrypted during HCUP processing.

Colorado

In Colorado two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Physician that performed the principal procedure is provided in MDNUM2_R.

Physician identification numbers may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Also, some hospitals appear to pad the Professional State License Number (a 5-digit code). Information was not available from the data source about the prevalence of these practices.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available from the data source about the prevalence of this practice. The provided physician identifiers are encrypted during HCUP processing.

Florida

In Florida two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Operating physician is provided in MDNUM2_R.

Physician identification numbers may be used to track physicians within and across hospitals. Florida reports state license numbers for the physician identifiers. During HCUP processing, physician identifiers were encrypted.

Caution should be used when tracking physicians across 2003. The physician identifiers supplied by the data source do not conform to the documented pattern. Not all identifiers included a two-character prefix, and not all had the same length.

Iowa

In Iowa three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R.
2. Physician that performed the principal procedure is provided in MDNUM2_R.
3. Admitting physician is provided in MDNUM3_R.

Physician identification numbers may be used to track physicians within and across hospitals. Iowa reports Universal Physician Identification Numbers (UPINs). The provided physician identifiers are encrypted during HCUP processing.

Kentucky

In Kentucky three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R,
2. Physician that performed the primary procedure is provided in MDNUM2_R,
3. 1st other physician is provided in MDNUM3_R, and
4. 2nd other physician is provided in MDNUM4_R.

Physician identification numbers may not accurately track physicians within and across hospitals. Kentucky collects two different types of physician identifiers, Universal Physician Identification Numbers (UPINs) and state license numbers. The provided physician identifiers are encrypted during HCUP processing.

Maryland

In Maryland, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Operating physician is provided in MDNUM2_R.

Physician identification numbers can be used to track physicians within and across hospitals. Maryland reports a state license number assigned by MedChi, The Maryland

State Medical Society (formerly known as the Medical and Chirurgical Faculty of the State of Maryland). Source documentation describes strict assignment and verification rules for this field.

Beginning in 2003, Maryland encrypted their physician identifiers prior to submission to HCUP. Prior to 2003, the supplied physician identifiers were unencrypted.

Michigan

In Michigan, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Primary surgeon is provided in MDNUM2_R.

Physician identification numbers do not accurately track physicians across hospitals. Michigan reports hospital-specific physician identifiers. During HCUP processing, physician identifiers were encrypted.

New Jersey

In New Jersey, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R,
2. Surgeon is provided in MDNUM2_R

Physician identification numbers may not accurately track physicians within and across hospitals. During HCUP processing, physician identifiers are encrypted. The coding of the physician identification number varies across years:

Year	Physician Identifier
1988-93	New Jersey state license numbers
1994-95	Universal Physician Identification Numbers (UPINs)
Beginning in 1996	New Jersey state license numbers.

New York

In New York, three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R,
2. Operating physician is provided in MDNUM2_R, and
3. Other physician is provided in MDNUM3_R.

Physician identification numbers can be used to track physicians within and across hospitals. New York reports state license numbers as physician identifiers. Source documentation indicates that if the reported physician number did not possess a valid

New York state license number, the license number of the Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwives, and other licensed health care professionals may be included. It is impossible to identify the different types of providers in the HCUP data.

The provided physician identifiers are encrypted during HCUP processing.

Beginning in the 1998 data, physician identifiers are missing (" ") on discharges with an indication of an induced abortion. New York identifies an indication of induced abortion by ICD-9-CM diagnosis or procedure code:

- An admitting, principal, or secondary diagnosis of "6350" through "6399", or "7796".
- A principal or secondary procedure of "690", "695", "696", "6993", "738", "7491", "750", "751", or "9649".

Please note that the admitting diagnosis is not retained in the HCUP databases.

Nevada

In Nevada, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R, and
2. Operating physician is provided in MDNUM2_R.

Physician identification numbers can be used to track physicians within and across hospitals. Nevada provides the physician's state license number. During HCUP processing, this number is encrypted.

Rhode Island

In Rhode Island, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R,
2. Principal surgeon is provided in MDNUM2_R.

Physician identification numbers may not accurately track physicians across hospitals. Rhode Island provides blinded, hospital-specific numbers that cannot be linked to individual physicians. During HCUP processing, the provided physician identifiers are encrypted.

Washington

In Washington, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Other physician is provided in MDNUM2_R.

Physician identification numbers do not accurately track physicians within and across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers. During HCUP processing, the physician identifiers are encrypted.

West Virginia

In West Virginia, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Other physician is provided in MDNUM2_R.

Physician identification numbers do not accurately track physicians within and across hospitals. West Virginia collects different types of physician identifiers depending on the payer:

- The Universal Physician Identification Numbers (UPINs) are coded on Medicare patients.
- A West Virginia Medicaid physician identifier is coded on Medicaid patients. The same physician treating two different Medicaid patients can have two different physician identifiers. One identifier is used for new Medicaid patients; the other identifier is used for established Medicaid patients.
- The physician's state license number which starts with "WV" is coded on most commercial patients.

Some hospitals use their own physician identifiers and do not provide the UPIN, Medicaid and state license numbers. The provided physician identifiers are encrypted during HCUP processing.

MDNUM1_S - Physician 1 number (synthetic)

General Notes

HCUP encrypted physician identifiers are referred to by different names in the HCUP data across years.

Year	Variable
1988-2000	MDID_S
2001-2002	MDNUM1_S
Beginning with 2003	MDNUM1_R

MDNUM1_S contains a fixed-key (one-to-one) encryption of the supplied physician 1 number (MDNUM1), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:; '*@" are retained in the encrypted value, but not in the same location.
- Leading zeros are encrypted so that the two original physician identifiers "000A6" and "A6" are distinctly different.
- When the original physician 1 number and physician 2 number identifiers are the same, the synthetic identifiers, MDNUM1_S and MDNUM2_S, are the same.
- When the MDNUM1 in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, MDNUM1_S is the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier MDNUM1_S refers to individual physicians or to groups. If the physician 1 numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether MDNUM1_S refers to individual physicians or to groups.

Beginning in the 1993 data, supplied physician 1 identifiers were checked for null characters. If null characters were found, they were replaced by blanks before the identifier was encrypted. Since this conversion was not done in prior years of HCUP data, the encrypted physician 1 identifiers from 1993 on may not match those in earlier years. However, null characters are rarely included.

Uniform Values			
Variable	Description	Value	Value Description
MDNUM1_S	Physician 1 number (synthetic)	16(a)	Synthetic physician identifier
		Blank	Missing

State Specific Notes

Arizona

In Arizona two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Physician that performed the primary procedure is provided in MDNUM2_S.

Physician identification numbers may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or other health care practitioner. Information was not available about the prevalence of this practice.
- Some hospitals use one physician identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.
- Physician identifiers in July-December 2002 generally include a first-digit prefix of "1"; in other periods, the prefix is generally "0".

The physician identification number includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are unspecified. The provided physician identifiers are encrypted during HCUP processing.

The physician identifiers provided by Arizona for the second half of 2002 were constructed differently than the first half of 2002 and following years (i.e., 2003 forward). Physicians cannot be accurately tracked across the second half of 2002.

Colorado

In Colorado two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Physician that performed the principal procedure is provided in MDNUM2_S.

Physician identification numbers may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Also, some hospitals appear to pad the Professional State License Number (a 5-digit code). Information was not available from the data source about the prevalence of these practices.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available from the data source about the prevalence of this practice. The provided physician identifiers are encrypted during HCUP processing.

Florida

In Florida two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Operating physician is provided in MDNUM2_S.

Physician identification numbers may be used to track physicians within and across hospitals. Florida reports state license numbers for the physician identifiers. During HCUP processing, physician identifiers were encrypted.

Iowa

In Iowa three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S.
2. Physician that performed the principal procedure is provided in MDNUM2_S.
3. Admitting physician is provided in MDNUM3_S.

Physician identification numbers may be used to track physicians within and across hospitals. Iowa reports Universal Physician Identification Numbers (UPINs). The provided physician identifiers are encrypted during HCUP processing.

Kentucky

In Kentucky three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S,
2. Physician that performed the primary procedure is provided in MDNUM2_S, and
3. 1st other physician is provided in MDNUM3_S.

Physician identification numbers may not accurately track physicians within and across hospitals. Kentucky collects two different types of physician identifiers, Universal Physician Identification Numbers (UPINs) and state license numbers. The provided physician identifiers are encrypted during HCUP processing.

Maryland

In Maryland, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Operating physician is provided in MDNUM2_S.

Physician identification numbers can be used to track physicians within and across hospitals. Maryland reports a state license number assigned by MedChi, The Maryland State Medical Society (formerly known as the Medical and Chirurgical Faculty of the State of Maryland). Source documentation describes strict assignment and verification rules for this field.

Beginning in 2003, Maryland encrypted their physician identifiers prior to submission to HCUP. Prior to 2003, the supplied physician identifiers were unencrypted.

Michigan

In Michigan, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Primary surgeon is provided in MDNUM2_S.

Physician identification numbers do not accurately track physicians across hospitals. Michigan reports hospital-specific physician identifiers. During HCUP processing, physician identifiers were encrypted.

Nevada

In Nevada, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S, and
2. Operating physician is provided in MDNUM2_S.

Physician identification numbers can be used to track physicians within and across hospitals. Nevada provides the physician's state license number. During HCUP processing, this number is encrypted.

Prior to 2003, Nevada supplied a 6-digit physician state license number. These identification numbers contain a 2-digit specialty code that hospitals place in front of the 4-digit license number. Beginning with 2003, Nevada elected to request license

numbers without the specialty codes. Nevada supplies the 4-digit state license number in a 6-digit field. Some 5- and 6-digit codes may occur in the data subsequent to the change in specifications.

New Jersey

In New Jersey, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S,
2. Surgeon is provided in MDNUM2_S

Physician identification numbers may not accurately track physicians within and across hospitals. During HCUP processing, physician identifiers are encrypted. The coding of the physician identification number varies across years:

Year	Physician Identifier
1988-93	New Jersey state license numbers
1994-95	Universal Physician Identification Numbers (UPINs)
Beginning in 1996	New Jersey state license numbers.

New York

In New York, three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S,
2. Operating physician is provided in MDNUM2_S, and
3. Other physician is provided in MDNUM3_S.

Physician identification numbers can be used to track physicians within and across hospitals. New York reports state license numbers as physician identifiers. Source documentation indicates that if the reported physician number did not possess a valid New York state license number, the license number of the Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwives, and other licensed health care professionals may be included. It is impossible to identify the different types of providers in the HCUP data.

The provided physician identifiers are encrypted during HCUP processing.

Beginning in the 1998 data, physician identifiers are missing (" ") on discharges with an indication of an induced abortion. New York identifies an indication of induced abortion by ICD-9-CM diagnosis or procedure code:

- An admitting, principal, or secondary diagnosis of "6350" through "6399", or "7796".
- A principal or secondary procedure of "690", "695", "696", "6993", "738", "7491", "750", "751", or "9649".

Please note that the admitting diagnosis is not retained in the HCUP databases.

Rhode Island

In Rhode Island, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S,
2. Principal surgeon is provided in MDNUM2_S.

Physician identification numbers may not accurately track physicians across hospitals. Rhode Island provides blinded, hospital-specific numbers that cannot be linked to individual physicians. During HCUP processing, the provided physician identifiers are encrypted.

Washington

In Washington, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Other physician is provided in MDNUM2_S.

Physician identification numbers do not accurately track physicians within and across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers. During HCUP processing, the physician identifiers are encrypted.

West Virginia

In West Virginia, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Other physician is provided in MDNUM2_S.

Physician identification numbers do not accurately track physicians within and across hospitals. West Virginia collects different types of physician identifiers depending on the payer:

- The Universal Physician Identification Numbers (UPINs) are coded on Medicare patients.

- A West Virginia Medicaid physician identifier is coded on Medicaid patients. The same physician treating two different Medicaid patients can have two different physician identifiers. One identifier is used for new Medicaid patients; the other identifier is used for established Medicaid patients.
- The physician's state license number which starts with "WV" is coded on most commercial patients.

Some hospitals use their own physician identifiers and do not provide the UPIN, Medicaid and state license numbers. The provided physician identifiers are encrypted during HCUP processing.

MDNUM2_R - Physician 2 number (re-identified)

General Notes

HCUP encrypted physician identifiers are referred to by different names in the HCUP data across years.

Year	Variable
1988-2000	MDID_S
2001-2002	MDNUM1_S
Beginning with 2003	MDNUM1_R

MDNUM2_R is specific to physicians. If the physician identifier is based on a state license number or Universal Physician Identification Number (UPIN), then MDNUM2_R can be used to track a physician across hospitals. If the physician identifier is based on hospital-specific identifiers, then it can only be used to track physicians within a hospital. Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier refers to individual physicians or to groups. Refer to state-specific notes for more information about the type of physician identifiers provided by each state.

Because of a change in the algorithm for creating a masked physician number, physicians cannot be tracked from before 2003 to after 2003. In HCUP data prior to 2003, a synthetic physician number (MDNUM2_S prior to 2003 and SURGID_S prior to 2001), created using fixed-key encryption, was available. Starting in data year 2003, a reidentification number (MDNUM2_R) was used. MDNUM2_R includes an arbitrarily chosen, identifying number that is unique to the physician identifier provided to HCUP.

Uniform Values

Variable	Description	Value	Value Description
MDNUM2_R	Physician 2 number (re-identified)	9(n)	Physician identifier
		.	Missing

State Specific Notes

Arizona

In Arizona two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Physician that performed the primary procedure is provided in MDNUM2_R.

Physician identification numbers may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or other health care practitioner. Information was not available about the prevalence of this practice.
- Some hospitals use one physician identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.

The physician identification number includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are unspecified. The provided physician identifiers are encrypted during HCUP processing.

Colorado

In Colorado two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Physician that performed the principal procedure is provided in MDNUM2_R.

Physician identification numbers may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Also, some hospitals appear to pad the Professional State License Number (a 5-digit code). Information was not available from the data source about the prevalence of these practices.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available from the data source about the prevalence of this practice. The provided physician identifiers are encrypted during HCUP processing.

Florida

In Florida two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Operating physician is provided in MDNUM2_R.

Physician identification numbers may be used to track physicians within and across hospitals. Florida reports state license numbers for the physician identifiers. During HCUP processing, physician identifiers were encrypted.

Caution should be used when tracking physicians across 2003. The physician identifiers supplied by the data source do not conform to the documented pattern. Not all identifiers included a two-character prefix, and not all had the same length.

Iowa

In Iowa three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R.
2. Physician that performed the principal procedure is provided in MDNUM2_R.
3. Admitting physician is provided in MDNUM3_R.

Physician identification numbers may be used to track physicians within and across hospitals. Iowa reports Universal Physician Identification Numbers (UPINs). The provided physician identifiers are encrypted during HCUP processing.

Kentucky

In Kentucky three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R,
2. Physician that performed the primary procedure is provided in MDNUM2_R,
3. 1st other physician is provided in MDNUM3_R, and
4. 2nd other physician is provided in MDNUM4_R.

Physician identification numbers may not accurately track physicians within and across hospitals. Kentucky collects two different types of physician identifiers, Universal Physician Identification Numbers (UPINs) and state license numbers. The provided physician identifiers are encrypted during HCUP processing.

Maryland

In Maryland, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM_R1 and
2. Operating physician is provided in MDNUM2_R.

Physician identification numbers can be used to track physicians within and across hospitals. Maryland reports a state license number assigned by MedChi, The Maryland

State Medical Society (formerly known as the Medical and Chirurgical Faculty of the State of Maryland). Source documentation describes strict assignment and verification rules for this field.

Beginning in 2003, Maryland encrypted their physician identifiers prior to submission to HCUP. Prior to 2003, the supplied physician identifiers were unencrypted.

Michigan

In Michigan, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Primary surgeon is provided in MDNUM2_R.

Physician identification numbers do not accurately track physicians across hospitals. Michigan reports hospital-specific physician identifiers. During HCUP processing, physician identifiers were encrypted.

New Jersey

In New Jersey, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R,
2. Surgeon is provided in MDNUM2_R

Physician identification numbers may not accurately track physicians within and across hospitals. During HCUP processing, physician identifiers are encrypted. The coding of the physician identification number varies across years:

Year	Physician Identifier
1988-93	New Jersey state license numbers
1994-95	Universal Physician Identification Numbers (UPINs)
Beginning in 1996	New Jersey state license numbers.

New York

In New York, three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R,
2. Operating physician is provided in MDNUM2_R, and
3. Other physician is provided in MDNUM3_R.

Physician identification numbers can be used to track physicians within and across hospitals. New York reports state license numbers as physician identifiers. Source documentation indicates that if the reported physician number did not possess a valid

New York state license number, the license number of the Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwives, and other licensed health care professionals may be included. It is impossible to identify the different types of providers in the HCUP data.

The provided physician identifiers are encrypted during HCUP processing.

Beginning in the 1998 data, physician identifiers are missing (" ") on discharges with an indication of an induced abortion. New York identifies an indication of induced abortion by ICD-9-CM diagnosis or procedure code:

- An admitting, principal, or secondary diagnosis of "6350" through "6399", or "7796".
- A principal or secondary procedure of "690", "695", "696", "6993", "738", "7491", "750", "751", or "9649".

Please note that the admitting diagnosis is not retained in the HCUP databases.

Nevada

In Nevada, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R, and
2. Operating physician is provided in MDNUM2_R.

Physician identification numbers can be used to track physicians within and across hospitals. Nevada provides the physician's state license number. During HCUP processing, this number is encrypted.

Rhode Island

In Rhode Island, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R,
2. Principal surgeon is provided in MDNUM2_R.

Physician identification numbers may not accurately track physicians across hospitals. Rhode Island provides blinded, hospital-specific numbers that cannot be linked to individual physicians. During HCUP processing, the provided physician identifiers are encrypted.

Washington

In Washington, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Other physician is provided in MDNUM2_R.

Physician identification numbers do not accurately track physicians within and across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers. During HCUP processing, the physician identifiers are encrypted.

West Virginia

In West Virginia, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R and
2. Other physician is provided in MDNUM2_R.

Physician identification numbers do not accurately track physicians within and across hospitals. West Virginia collects different types of physician identifiers depending on the payer:

- The Universal Physician Identification Numbers (UPINs) are coded on Medicare patients.
- A West Virginia Medicaid physician identifier is coded on Medicaid patients. The same physician treating two different Medicaid patients can have two different physician identifiers. One identifier is used for new Medicaid patients; the other identifier is used for established Medicaid patients.
- The physician's state license number which starts with "WV" is coded on most commercial patients.

Some hospitals use their own physician identifiers and do not provide the UPIN, Medicaid and state license numbers. The provided physician identifiers are encrypted during HCUP processing.

MDNUM2_S - Physician 2 number (synthetic)

General Notes

HCUP encrypted physician identifiers are referred to by different names in the HCUP data across years.

Year	Variable
1988-2000	MDID_S
2001-2002	MDNUM1_S
Beginning with 2003	MDNUM1_R

Prior to 2001, this data element is called SURGID_S.

MDNUM2_S contains a fixed-key (one-to-one) encryption of the supplied physician 2 number (MDNUM2), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:;'*@ " are retained in the encrypted value, but not in the same location.
- Leading zeros are encrypted so that the two original physician identifiers "000A6" and "A6" are distinctly different.
- When the original physician 1 number and physician 2 identifiers are the same, the synthetic identifiers, MDNUM1_S and MDNUM2_S, are the same.
- When the MDNUM1 in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, MDNUM2_S is the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier MDNUM2_S refers to individual physicians or to groups. If the physician 2 numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether MDNUM2_S refers to individual physicians or to groups.

Beginning in the 1993 data, supplied physician identifiers were checked for null characters. If null characters were found, they were replaced by blanks before the identifier was encrypted. Since this conversion was not done in prior years of HCUP data, the encrypted physician identifiers from 1993 on may not match those in earlier years. However, null characters are rarely included.

Uniform Values

Variable	Description	Value	Value Description
MDNUM2_S	Physician 2 number (synthetic)	16(a)	Synthetic physician identifier
		Blank	Missing

State Specific Notes

Arizona

In Arizona two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Physician that performed the primary procedure is provided in MDNUM2_S.

Physician identification numbers may not accurately track physicians across hospitals for the following reasons:

- Some hospitals assign their own internal physician identification numbers rather than using the license numbers issued by the licensing agency of the physician or other health care practitioner. Information was not available about the prevalence of this practice.
- Some hospitals use one physician identification number for several physicians that are part of the same physician practice group. Information was not available about the prevalence of this practice.
- Physician identifiers in July-December 2002 generally include a first-digit prefix of "1"; in other periods, the prefix is generally "0".

The physician identification number includes license numbers from the following board of examiners: Medical, Osteopathic, Podiatrists, and Nurses. In addition, Arizona accepts licensing numbers from other health practitioner licensing boards, but these boards are unspecified. The provided physician identifiers are encrypted during HCUP processing.

The physician identifiers provided by Arizona for the second half of 2002 were constructed differently than the first half of 2002 and following years (i.e., 2003 forward). Physicians cannot be accurately tracked across the second half of 2002.

Colorado

In Colorado two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Physician that performed the principal procedure is provided in MDNUM2_S.

Physician identification numbers may not accurately track physicians across hospitals. The state encourages hospitals to use the Professional State License Number as an identifier, but some hospitals continue to use their own internal identification number. Also, some hospitals appear to pad the Professional State License Number (a 5-digit code). Information was not available from the data source about the prevalence of these practices.

Some hospitals may use one license number for all physicians in order to protect physician confidentiality. Information was not available from the data source about the prevalence of this practice. The provided physician identifiers are encrypted during HCUP processing.

Florida

In Florida two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Operating physician is provided in MDNUM2_S.

Physician identification numbers may be used to track physicians within and across hospitals. Florida reports state license numbers for the physician identifiers. During HCUP processing, physician identifiers were encrypted.

Iowa

In Iowa three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S.
2. Physician that performed the principal procedure is provided in MDNUM2_S.
3. Admitting physician is provided in MDNUM3_S.

Physician identification numbers may be used to track physicians within and across hospitals. Iowa reports Universal Physician Identification Numbers (UPINs). The provided physician identifiers are encrypted during HCUP processing.

Kentucky

In Kentucky three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S,
2. Physician that performed the primary procedure is provided in MDNUM2_S, and
3. 1st other physician is provided in MDNUM3_S.

Physician identification numbers may not accurately track physicians within and across hospitals. Kentucky collects two different types of physician identifiers, Universal

Physician Identification Numbers (UPINs) and state license numbers. The provided physician identifiers are encrypted during HCUP processing.

Maryland

In Maryland, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Operating physician is provided in MDNUM2_S.

Physician identification numbers can be used to track physicians within and across hospitals. Maryland reports a state license number assigned by MedChi, The Maryland State Medical Society (formerly known as the Medical and Chirurgical Faculty of the State of Maryland). Source documentation describes strict assignment and verification rules for this field.

Beginning in 2003, Maryland encrypted their physician identifiers prior to submission to HCUP. Prior to 2003, the supplied physician identifiers were unencrypted.

Michigan

In Michigan, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Primary surgeon is provided in MDNUM2_S.

Physician identification numbers do not accurately track physicians across hospitals. Michigan reports hospital-specific physician identifiers. During HCUP processing, physician identifiers were encrypted.

Nevada

In Nevada, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S, and
2. Operating physician is provided in MDNUM2_S.

Physician identification numbers can be used to track physicians within and across hospitals. Nevada provides the physician's state license number. During HCUP processing, this number is encrypted.

Prior to 2003, Nevada supplied a 6-digit physician state license number. These identification numbers contain a 2-digit specialty code that hospitals place in front of the 4-digit license number. Beginning with 2003, Nevada elected to request license numbers without the specialty codes. Nevada supplies the 4-digit state license number

in a 6-digit field. Some 5- and 6-digit codes may occur in the data subsequent to the change in specifications.

New Jersey

In New Jersey, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S,
2. Surgeon is provided in MDNUM2_S

Physician identification numbers may not accurately track physicians within and across hospitals. During HCUP processing, physician identifiers are encrypted. The coding of the physician identification number varies across years:

Year	Physician Identifier
1988-93	New Jersey state license numbers
1994-95	Universal Physician Identification Numbers (UPINs)
Beginning in 1996	New Jersey state license numbers.

New York

In New York, three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S,
2. Operating physician is provided in MDNUM2_S, and
3. Other physician is provided in MDNUM3_S.

Physician identification numbers can be used to track physicians within and across hospitals. New York reports state license numbers as physician identifiers. Source documentation indicates that if the reported physician number did not possess a valid New York state license number, the license number of the Chief of Service should have been reported.

New York does not limit this field to physicians; dentists, podiatrists, psychologists, nurse/midwives, and other licensed health care professionals may be included. It is impossible to identify the different types of providers in the HCUP data.

The provided physician identifiers are encrypted during HCUP processing.

Beginning in the 1998 data, physician identifiers are missing (" ") on discharges with an indication of an induced abortion. New York identifies an indication of induced abortion by ICD-9-CM diagnosis or procedure code:

- An admitting, principal, or secondary diagnosis of "6350" through "6399", or "7796".

- A principal or secondary procedure of "690", "695", "696", "6993", "738", "7491", "750", "751", or "9649".

Please note that the admitting diagnosis is not retained in the HCUP databases.

Rhode Island

In Rhode Island, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S,
2. Principal surgeon is provided in MDNUM2_S.

Physician identification numbers may not accurately track physicians across hospitals. Rhode Island provides blinded, hospital-specific numbers that cannot be linked to individual physicians. During HCUP processing, the provided physician identifiers are encrypted.

Washington

In Washington, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Other physician is provided in MDNUM2_S.

Physician identification numbers do not accurately track physicians within and across hospitals. Washington collects several different types of physician identifiers, depending on the type of identifier provided by the hospitals. Hospitals provide Medicaid, Universal Physician Identification Numbers (UPINs), and DOH/HPQAD license numbers as physician identifiers. During HCUP processing, the physician identifiers are encrypted.

West Virginia

In West Virginia, two types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S and
2. Other physician is provided in MDNUM2_S.

Physician identification numbers do not accurately track physicians within and across hospitals. West Virginia collects different types of physician identifiers depending on the payer:

- The Universal Physician Identification Numbers (UPINs) are coded on Medicare patients.
- A West Virginia Medicaid physician identifier is coded on Medicaid patients. The same physician treating two different Medicaid patients can have two different

physician identifiers. One identifier is used for new Medicaid patients; the other identifier is used for established Medicaid patients.

- The physician's state license number which starts with "WV" is coded on most commercial patients.

Some hospitals use their own physician identifiers and do not provide the UPIN, Medicaid and state license numbers. The provided physician identifiers are encrypted during HCUP processing.

MDNUM3_R - Physician 3 number (re-identified)

General Notes

HCUP encrypted physician identifiers are referred to by different names in the HCUP data across years.

Year	Variable
1988-2000	MDID_S
2001-2002	MDNUM1_S
Beginning with 2003	MDNUM1_R

MDNUM3_R is specific to physicians. If the physician identifier is based on a state license number or Universal Physician Identification Number (UPIN), then MDNUM3_R can be used to track a physician across hospitals. If the physician identifier is based on hospital-specific identifiers, then it can only be used to track physicians within a hospital. Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier refers to individual physicians or to groups. Refer to state-specific notes for more information about the type of physician identifiers provided by each state.

Because of a change in the algorithm for creating a masked physician number, physicians cannot be tracked from before 2003 to after 2003. In HCUP data prior to 2003, a synthetic physician number (MDNUM3_S), created using fixed-key encryption, was available. Starting in data year 2003, a reidentification number (MDNUM3_R) was used. MDNUM3_R includes an arbitrarily chosen, identifying number that is unique to the physician identifier provided to HCUP.

Uniform Values

Variable	Description	Value	Value Description
MDNUM3_R	Physician 3 number (re-identified)	9(n)	Physician identifier
		.	Missing

State Specific Notes

Iowa

In Iowa three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R.
2. Physician that performed the principal procedure is provided in MDNUM2_R.
3. Admitting physician is provided in MDNUM3_R.

Physician identification numbers may be used to track physicians within and across hospitals. Iowa reports Universal Physician Identification Numbers (UPINs). The provided physician identifiers are encrypted during HCUP processing.

Kentucky

In Kentucky three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_R,
2. Physician that performed the primary procedure is provided in MDNUM2_R,
3. 1st other physician is provided in MDNUM3_R, and
4. 2nd other physician is provided in MDNUM4_R.

Physician identification numbers may not accurately track physicians within and across hospitals. Kentucky collects two different types of physician identifiers, Universal Physician Identification Numbers (UPINs) and state license numbers. The provided physician identifiers are encrypted during HCUP processing.

MDNUM3_S - Synthetic third physician number

General Notes

HCUP encrypted physician identifiers are referred to by different names in the HCUP data across years.

Year	Variable
1988-2000	MDID_S
2001-2002	MDNUM1_S
Beginning with 2003	MDNUM1_R

MDNUM3_S contains a fixed-key (one-to-one) encryption of the supplied third physician number (MDNUM3_S), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,;:'*@" are retained in the encrypted value, but not in the same location.
- Leading zeros are encrypted so that the two original physician identifiers "000A6" and "A6" are distinctly different.
- When the original physician identifiers are the same, the synthetic identifiers, MDID_S, SURGID_S and MDNUM3_S, are the same.
- When the MDNUM3_S in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, MDNUM3_S is the same.

Except in those data sources where physician license numbers are supplied, it is not known whether the physician identifier MDNUM3_S refers to individual physicians or to groups. If the physician numbers supplied by the data source are not restricted to license numbers, the state-specific note includes available information about reporting practices, including whether MDNUM3_S refers to individual physicians or to groups.

Supplied physician identifiers were checked for null characters. If null characters were found, they were replaced by blanks before the identifier was encrypted.

Uniform Values

Variable	Description	Value	Value Description
MDNUM3_S	Synthetic third physician number	16(a)	Synthetic physician identifier
		Blank	Missing

State Specific Notes

Iowa

In Iowa three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S.
2. Physician that performed the principal procedure is provided in MDNUM2_S.
3. Admitting physician is provided in MDNUM3_S.

Physician identification numbers may be used to track physicians within and across hospitals. Iowa reports Universal Physician Identification Numbers (UPINs). The provided physician identifiers are encrypted during HCUP processing.

Kentucky

In Kentucky three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S,
2. Physician that performed the primary procedure is provided in MDNUM2_S, and
3. 1st other physician is provided in MDNUM3_S.

Physician identification numbers may not accurately track physicians within and across hospitals. Kentucky collects two different types of physician identifiers, Universal Physician Identification Numbers (UPINs) and state license numbers. The provided physician identifiers are encrypted during HCUP processing.

North Carolina

In North Carolina, three types of physician identifiers are available:

1. Attending physician is provided in MDNUM1_S,
2. 1st other physician is provided in MDNUM2_S, and
3. 2nd other physician is provided in MDNUM3_S.

Physician identification numbers can be used to track physicians within and across hospitals. North Carolina provides the Universal Physician Identification Numbers (UPINs). During HCUP processing, physician identifiers are encrypted.

MDSPEC - Attending physician specialty, as received from source

General Notes

Beginning in 2001, this data element is called MDSPEC1.

The attending physician's specialty (MDSPEC) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Uniform Values

Variable	Description	Value	Value Description
MDSPEC	Attending physician specialty, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Maine

In Maine, MDSPEC is coded as follows:

MDSPEC	
<u>Value</u>	<u>Description</u>
01	Emergency Medicine
02	Preventative Medicine
03	Occupational Medicine
04	Public Health/Epidemiology
05	Oncology
06	General Practice
07	Alcohol Rehab

08	Infectious Diseases
09	Geriatrics
10	Allergy
11	Dermatology
12	Cardiology
13	Pulmonary/Respiratory
14	Physical Med/Rehab
15	DO Radiology
16	Not Used
17	DO Pathology
18	DO Anesthesiology
19	DO General Practice
20	Internal Medicine
21	Endocrinology
22	Gastroenterology
23	Nephrology
24	Urology
25	Hematology
26	Psychiatry
27	Proctology
28	Rheumatology
29	DO Dermatology
30	Not Used
31	Neurology
32	Ophthalmology
33	Otolaryngology
34	Nurse Anesthetist
35	Physicians Assistant
36	Optometrist
37	Genetics
38	Registered Nurse
39	Not Used
40	Radiology
41	Not Used
42	Not Used

43	Pathology
44	Not Used
45	Anesthesiology
46	Radiation Oncology
47	Not Used
48	Not Used
49	Not Used
50	Obstetrics & Gynecology
51	Pediatrics
52	Not Used
53	Pediatric Cardiology
54	Neonatology
55	Hospital Resident (D.O.)
56	Hospital Resident (M.D.)
57	DO Oncology/Hematology
58	Pediatric Neurology
59	Pediatric Oncology/Hematology
60	General Surgery
61	Orthopedic Surgery
62	Plastic Surgery
63	Thoracic Surgery
64	Neurological Surgery
65	Not Used
66	Not Used
67	Not Used
68	Not Used
69	Unknown
70	General Dentistry
71	Podiatry
72	Oral Surgery
73	Not Used
74	Not Used
75	Not Used
76	Not Used
77	Not Used

78	DO Gastroenterology
79	DO Cardiology
80	DO Family Practice
81	DO Emergency Medicine
82	DO Physical Med/Rehab
83	DO Internal Medicine
84	DO Urology
85	DO Proctology
86	DO Neurology
87	DO Ophthalmology
88	DO Otolaryngology
89	DO Psychiatry
90	DO Obstetrics & Gynecology
91	DO General Surgery
92	DO Orthopedic Surgery
93	DO Plastic Surgery
94	DO Thoracic Surgery
95	DO Pediatrics
96	Psychology
97	Nurse Mid-Wife
98	Surgical Assistant
99	Family Practice

New Jersey

The length of MDSPEC is character 1.

In New Jersey, MDSPEC is coded as follows:

<u>Source Value</u>	<u>Description</u>
1	Medical (includes General and Family Practice)
2	Surgical
3	Obstetric
4	Gynecology
5	Pediatric
6	Newborn Pediatric

7	Psychiatric
8	Orthopedic
9	Dental

South Carolina

South Carolina reports physician specialty as the area in which the physician spends the most hours per week, as reported at license renewal. If the physician does not report hours, South Carolina assigns physician specialty as the first practice type reported by the physician.

Physicians report their specialties to South Carolina using the categories and abbreviations in the "source-specific descriptions" column of the following table. South Carolina assigns them to three-character codes and reports the data in that format. During HCUP processing, the three-character codes supplied by the state were assigned to MDSPEC.

In South Carolina, MDSPEC is coded as follows. Any other codes are undefined.

Source Value	Description
0AA	Pediatric Endocrinology (PDE)
0AB	Internal Medicine/Diagnostic Laboratory Immunology (ILI)
0AC	Internal Medicine, Geriatrics (IMG)
0AD	Neurological Surgery, Critical Care (NCC)
0AE	Pathology, Neuropathology (NP)
0AF	Neurology, Pediatric Surgery (NSP)
0AG	Orthopedic Surgery, Adult Reconstructive Orthopedics (OAR)
0AH	Obstetrics & Gynecology/Critical Care Medicine (OCC)
0AI	Orthopedic Surgery, Musculoskeletal Oncology (OMO)
0AJ	Orthopedic Surgery, Pediatric Orthopedics (OP)
0AK	Orthopedic Surgery, Sports Medicine (OSM)
0AL	Orthopedic Surgery, Trauma (OTR)
0AM	Pathology, Chemical (PCH)
0AN	Pathology, Cytopathology (PCP)
0AO	Pediatric Gastroenterology (PG) (code is zero-A-oh)
0AP	Pathology, Immunopathology (PIP)
0AQ	Pediatrics/Diagnostic Laboratory Immunology (PLI)
0AT	Undersea Medicine (UM)

0AU	Radiology, Vascular and Interventional (VIR)
0AV	Addiction Medicine (ADM)
0BB	Pathology, Radioisotopic (RIP)
0BJ	Pediatric Otolaryngology
0BL	Pain Medicine
0BM	Pediatric Ophthalmology
0BS	Obstetrics
0CB	Cardiothoracic Surgery
0CC	Surgery, Vascular (VS)
0CE	Cardiac Electrophysiology
0CJ	Pediatric Infectious Disease
0DD	Neonatal Medicine (NEO)
0EE	Pediatric Pulmonology (PDP)
0FF	Radiation Oncology (RO)
0HH	Pediatric Emergency Medicine (PEM)
0II	Medical Genetics (MG)
0JJ	Psychiatry, Geriatric (PYG)
0KK	Orthopedic Surgery, Spine Surgery (OSS)
0LL	Allergy & Immunology/Diagnostic Laboratory Immunology (ALI)
0MM	Anesthesiology, Pain Management (APM)
0OO	Pathology, Blood Banking (BBK) (code is zero-oh-oh)
0PP	Anesthesiology, Critical Care (CCA)
0QQ	Pediatric Critical Care (CCP)
0RR	Surgery, Critical Care (CCS)
0SS	Neurology, Clinical Neurophysiology (CN)
0TT	Dermatological Immunology/Diagnostic Laboratory Immunology (DDL)
0UU	Family Practice, Geriatric Medicine (FPG)
0VV	Family Practice, Sports Medicine (FSM)
0WW	Pathology, Hematology (HMP)
0XX	Orthopedic Surgery, Hand Surgery (HSO)
0YY	Plastic Surgery, Hand Surgery (HSP)
0ZZ	Internal Medicine Cardiac Electrophysiology (ICE)
001	Aerospace Medicine (AM)

002	Allergy & Immunology (AI)
003	Anesthesiology (AN)
005	Cardiovascular Disease (CD)
006	Dermatology (D)
007	Diabetes (DIA)
008	Emergency Medicine (EM)
009	Endocrinology (END)
010	Family Practice (FP, FPP)
011	Gastroenterology (GE)
012	General Practice (GP), Dental Health Program (DHP), Intern
013	General Preventative Medicine (GPM)
014	Geriatrics (GER)
015	Gynecology (GYN, G)
016	Hematology (HEM)
018	Infectious Diseases (ID)
019	Internal Medicine (IM)
021	Legal Medicine (LM)
023	Nephrology (NEP)
024	Neurology (N)
025	Neurology, Child (CHN)
026	Neuropathology (NA)
027	Nuclear Medicine (NM)
028	Nutrition (NTR)
029	Obstetrics (OBS)
030	Obstetrics & Gynecology (OBG)
031	Occupational Medicine (OM)
032	Ophthalmology (OPH)
033	Otology (OT)
034	(OTL)
035	Pathology, Anatomic/Clinical (PTH)
036	Pathology, Clinical (CLP)
037	Pathology, Forensic (FOP)
038	Pediatrics (PD)
039	Pediatric Allergy (PDA)
040	Pediatric Cardiology (PDC)

041	Pharmacology, Clinical (PA)
042	Physical Medicine & Rehabilitation (PM)
043	Psychiatry (P)
044	Psychiatry, Child (CHP)
045	Psychoanalysis (PYA)
047	Public Health (PH)
048	Pulmonary Disease (PUD)
049	Radiology (R)
050	Radiology, Diagnostic (DR)
051	Radiology, Pediatric (PDR)
052	Therapeutic Radiology (TR)
053	Rheumatology (RHU)
056	Abdominal Surgery (ABS)
057	Surgery, Cardiovascular (CDS)
058	Surgery, Colon & Rectal (CRS)
059	Surgery, General (GS)
060	Surgery, Hand (HS)
061	Surgery, Head & Neck (HNS)
062	Surgery, Neurological (NS)
063	Surgery, Orthopedic (ORS)
064	Surgery, Pediatric (PDS)
065	Surgery, Plastic (PS)
066	Surgery, Thoracic (TS)
067	Surgery, Traumatic (TRS)
068	Surgery, Urological (U)
069	In 1993: Nuclear Radiology (NR). Beginning in 1994, Nuclear Radiology (OTHER).
071	Immunology (IG)
073	Oncology Medical (ON)
074	Otolaryngology (OTO)
080	Administrative Medicine (ADM)
081	Student Health (SH)
082	Pediatric Hematology-Oncology (PHO)
083	Pediatric Nephrology (PN, PNP)
084	Neonatal-Perinatal Medicine (NPM)

085	Pathology, Anatomic (ATP)
086	Gynecological Oncology (GO, ONC)
087	Maternal & Fetal Medicine (MFM)
088	Reproductive Endocrinology (REN, RE)
089	Allergy (A)
090	Adolescent Medicine (ADL)
091	Blood Banking (BLB)
092	Critical Care Medicine (CCM)
093	Chemical Pathology (CMP)
094	Diagnostic Lab Immunology (DLI)
095	Dermatopathology (DMP)
096	Facial Plastic Surgery, Otolaryngology (FPS)
097	Immunopathology (SID and NIS)
098	Medical Microbiology (MM)
099	Nuclear Radiology (NR)
103	General Practice, Dentist (GP-DENT)
108	Oral Surgery (OS-DENT)
110	Periodontics Dentist (PERIO-DENT)

South Carolina data do not separately classify some physician specialties. No documentation was available describing which physician specialties were used for:

- U.S. Air Force (AF)
- Pathology, Pediatric Pathology (PP)
- U.S. Navy (USN)
- U.S. Army (USA)
- Osteopathy (OST)
- U.S. Public Health Service (PHS)

MDSPEC1 - Physician 1 specialty, as received from source

General Notes

Prior to 2001, this data element is called MDSPEC.

The physician 1 specialty (MDSPEC1) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Uniform Values

Variable	Description	Value	Value Description
MDSPEC1	Physician 1 specialty, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Maine

In Maine, MDSPEC1 is coded as follows:

MDSPEC1	
<u>Value</u>	<u>Description</u>
01	Emergency Medicine
02	Preventative Medicine
03	Occupational Medicine
04	Public Health/Epidemiology
05	Oncology
06	General Practice
07	Alcohol Rehab
08	Infectious Diseases

09	Geriatrics
10	Allergy
11	Dermatology
12	Cardiology
13	Pulmonary/Respiratory
14	Physical Med/Rehab
15	DO Radiology
16	Not Used
17	DO Pathology
18	DO Anesthesiology
19	DO General Practice
20	Internal Medicine
21	Endocrinology
22	Gastroenterology
23	Nephrology
24	Urology
25	Hematology
26	Psychiatry
27	Proctology
28	Rheumatology
29	DO Dermatology
30	Not Used
31	Neurology
32	Ophthalmology
33	Otolaryngology
34	Nurse Anesthetist
35	Physicians Assistant
36	Optometrist
37	Genetics
38	Registered Nurse
39	Not Used
40	Radiology
41	Not Used
42	Not Used
43	Pathology

44	Not Used
45	Anesthesiology
46	Radiation Oncology
47	Not Used
48	Not Used
49	Not Used
50	Obstetrics & Gynecology
51	Pediatrics
52	Not Used
53	Pediatric Cardiology
54	Neonatology
55	Hospital Resident (D.O.)
56	Hospital Resident (M.D.)
57	DO Oncology/Hematology
58	Pediatric Neurology
59	Pediatric Oncology/Hematology
60	General Surgery
61	Orthopedic Surgery
62	Plastic Surgery
63	Thoracic Surgery
64	Neurological Surgery
65	Not Used
66	Not Used
67	Not Used
68	Not Used
69	Unknown
70	General Dentistry
71	Podiatry
72	Oral Surgery
73	Not Used
74	Not Used
75	Not Used
76	Not Used
77	Not Used
78	DO Gastroenterology

79	DO Cardiology
80	DO Family Practice
81	DO Emergency Medicine
82	DO Physical Med/Rehab
83	DO Internal Medicine
84	DO Urology
85	DO Proctology
86	DO Neurology
87	DO Ophthalmology
88	DO Otolaryngology
89	DO Psychiatry
90	DO Obstetrics & Gynecology
91	DO General Surgery
92	DO Orthopedic Surgery
93	DO Plastic Surgery
94	DO Thoracic Surgery
95	DO Pediatrics
96	Psychology
97	Nurse Mid-Wife
98	Surgical Assistant
99	Family Practice

New Jersey

The length of MDSPEC1 is character 1.

In New Jersey, MDSPEC1 is coded as follows:

<u>Source Value</u>	<u>Description</u>
1	Medical (includes General and Family Practice)
2	Surgical
3	Obstetric
4	Gynecology
5	Pediatric
6	Newborn Pediatric
7	Psychiatric

8	Orthopedic
9	Dental

South Carolina

South Carolina reports physician specialty as the area in which the physician spends the most hours per week, as reported at license renewal. If the physician does not report hours, South Carolina assigns physician specialty as the first practice type reported by the physician.

Beginning in 2004, physicians report their specialties to South Carolina using abbreviations in the "source-specific descriptions" column of the following table. Prior to 2004, both abbreviation and numeric categories were used by physicians. South Carolina assigns specialties to three-character codes and reports the data in that format. During HCUP processing, the three-character codes supplied by the state were assigned to MDSPEC1.

In South Carolina, MDSPEC1 is coded as follows. Any other codes are undefined.

Source Value	Description
A	Allergy
AD	Administrative Medicine
ADL	Adolescent Medicine
ADM	Addiction Medicine
ADP	Addiction Psychiatry
AI	Allergy And Immunology
ALI	Allergy & Immunology/Clinical And Laboratory Immunology
AM	Aerospace Medicine
AN	Anesthesiology
APM	Pain Management (Anesthesiology)
AS	Abdominal Surgery
ATP	Anatomic Pathology
BBK	Blood Banking/Transfusion Medicine
CBG	Clinical Biochemical Genetics
CCA	Critical Care Medicine (Anesthesiology)
CCG	Clinical Cytogenetics
CCM	Critical Care Medicine (Internal Medicine)
CCP	Pediatric Critical Care Medicine

CCS	Surgical Critical Care (Surger)
CD	Cardiovascular Disease
CDS	Cardiovascular Surgery
CE	Cardiac Electrophysiology
CG	Clinical Genetics
CHN	Child Neurology
CHP	Child & Adolescent Psychiatry
CLP	Clinical Pathology
CMG	Clinical Molecular Genetics
CN	Clinical Neurophysiology
CRS	Colon & Rectal Surgery
D	Dermatology
DDL	Clinical And Laboratory Dermatological Immunology
DIA	Diabetes
DLI	Diagnostic Laboratory/Immunology
DMP	Dermatopathology
DR	Diagnostic Radiology
EM	Emergency Medicine
END	Endocrinology, Diabetes And Metabolism
ESM	Sports Medicine (Emergency Medicine)
ETX	Medical Toxicology (Emergency Medicine)
FOP	Forensic Pathology
FP	Family Practice
FPG	Geriatric Medicine (Family Practice)
FPS	Facial Plastic Surgery
FSM	Sports Medicine (Family Practice)
GE	Gastroenterology
GER	Geriatrics
GO	Gynecological Oncology
GP	General Practice
GPM	General Preventive Medicine
GS	General Surgery
GYN	Gynecology
HEM	Hematology (Internal Medicine)
HEP	Hepatology

HMP	Hematology (Pathology)
HNS	Head & Neck Surgery
HSO	Hand Surgery (Orthopedic Surgery)
HSP	Surgery of the Hand (Plastic Surgery) (D)
HSS	Surgery Of The Hand (Surgery)
ID	Infectious Disease
IG	Immunology
ILI	Clinical And Laboratory Immunology (Internal Medicine)
IM	Internal Medicine
IMG	Geriatric Medicine (Internal Medicine)
ISM	Sports Medicine (Internal Medicine)
LM	Legal Medicine
MFM	Maternal & Fetal Medicine
MG	Medical Genetics
MM	Medical Microbiology
N	Neurology
NCC	Critical Care Medicine (Neurological Surgery)
NEO	Neo Natal
NEP	Nephrology
NM	Nuclear Medicine
NP	Neuropathology
NPM	Neonatal Perinatal Medicine
NR	Nuclear Radiology
NS	Neurological Surgery
NSP	Pediatric Surgery (Neurology)
NTR	Nutrition
OAR	Adult Reconstructive Orthopedics
OBG	Obstetrics & Gynecology
OBS	Obstetrics
OCC	Critical Care Medicine (Obstetrics & Gynecology)
OM	Occupational Medicine
OMO	Musculoskeletal Oncology
ON	Medical Oncology
OP	Pediatric Orthopedics
OPH	Ophthalmology

ORS	Orthopedic Surgery
OS	Other Specialty (Physician designated a specialty ther than appearing here)
OSM	Sports Medicine (Orthopedic Surgery)
OSS	Orthopedic Surgery of the Spine
OT	Otology
OTO	Otolaryngology
OTR	Orthopedic Trauma
P	Psychiatry
PA	Clinical Pharmacology
PCH	Chemical Pathology
PCP	Cytopathology
PD	Pediatrics
PDA	Pediatric Allergy
PDC	Pediatric Cardiology
PDE	Pediatric Endocrinology
PDO	Pediatric Otolaryncology
PDP	Pediatric Pulmonology
PDR	Pediatric Radiology
PDS	Pediatric Surgery
PDT	Medical Toxicology(Pediatrics)
PEM	Pediatric Emergency Medicine
PG	Pediatric Gastroenterology
PH	Public Health and General Prevention Medicine
PHO	Pediatric Hematology/Oncology
PIP	Immunopathology
PLI	Clinical And Laboratory Immunology (Pediatrics)
PM	Physical Medicine and Rehabilitation
PMD	Pain Medicine
PN	Pediatric Nephrology
PO	Pediatric Ophthalmology
PP	Pediatric Pathology
PPR	Pediatric Rheumatology
PS	Plastic Surgery
PSM	Sports Medicine (Pediatrics)

PTH	Anatomic/Clinical Pathology
PTX	Medical Toxicology (Preventive Medicine)
PUD	Pulmonary Diseases
PYA	Psychoanalysis
PYG	Geriatric Psychiatry
R	Radiology
REN	Reproductive Endocrinology
RHU	Rheumatology
RIP	Radioisotopic Pathology
RNR	Neuroradiology
RO	Radiation Oncology
RP	Radiological Physics
SH	Student Health
TR	Therapeutic Radiation
TRS	Traumatic Surgery
TS	Thoracic Surgery
U	Urology
UM	Undersea Medicine
UP	Pediatric Urology
VIR	Vascular And Interventional Radiology
VS	General Vascular Surgery

South Carolina data do not separately classify some physician specialties. No documentation was available describing which physician specialties were used for:

- U.S. Air Force (AF)
- Pathology, Pediatric Pathology (PP)
- U.S. Navy (USN)
- U.S. Army (USA)
- Osteopathy (OST)
- U.S. Public Health Service (PHS)

Wisconsin

In Wisconsin, MDSPEC1 is coded as follows:

MDSPEC1	
<u>Value</u>	<u>Description</u>

001	Allergy- Immunology
002	Anesthesiology
003	Dermatology
004	Internal Medicine
005	IM - Cardiology
006	IM - Gastroenterology
007	Hematology
008	General Practice
009	Preventative Medicine
010	Neurology
011	Surgery - Neurological
012	Obstetrics & Gynecology
013	Ophthalmology
014	Orthopedic Surgery
015	Otorhinolaryngology - ENT
016	Pathology
017	Pathology - Clinical
018	Pediatrics
019	Physical Medicine & Rehab
020	Psychiatry - General
021	Psychiatry - Child
022	Public Health
023	Nuclear Medicine
024	Retired
025	Surgery - General
026	Surgery - Plastic
027	Surgery - Thoracic
028	Urology
029	Geriatrics
030	Occupational Medicine
031	Emergency Medicine
032	Aviation Medicine
033	Aerospace Medicine
034	Research Medicine
036	Proctology

037	Academic Medicine
038	Oncology
039	Institutional Medicine
040	Nephrology
041	Family Practice
043	Radiology - Diagnostic
044	Surgery - Cardiovascular
045	IM - Pulmonary Medicine
046	Hebiatrics
047	Immunology - Infectious Diseases
048	Pharmacology - Clinical
049	Alcoholism - Chemical Dependency
051	Neurophysiology
052	School Physician
053	Radiology
054	Surgery - Colon & Rectal
056	Endocrinology)
057	Rheumatology
058	Surgery - Maxillofacial
059	Surgery - Perihpheral Vascular
060	Pediatrics - Other
061	Genetics
062	Perinatology
063	Neonatology
064	Surgery - Hand
065	Hyperbaric Medicine
066	Pain Management
067	Otolaryngology
068	Radiology - Nuclear Medicine
069	Radiology - Ultra Sound
070	Radiation Oncology
071	Administrative Medicine
072	Pathology - Surgical Anatomic
073	Pathology - Forensic
098	Sleep Disorders Medicine

099	Other - Not Listed
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MDSPEC2 - Physician 2 specialty, as received from source

General Notes

Prior to 2001, this data element is called SURGSPEC.

The physician 2 specialty (MDSPEC2) is retained as provided by the data source. The original values have not been recoded into uniform HCUP values and are source-specific.

Uniform Values

Variable	Description	Value	Value Description
MDSPEC2	Physician 2 specialty, as received from source	n(a)	State specific coding - See the "State Specific Notes" section for details

State Specific Notes

Maine

In Maine, MDSPEC2 is coded as follows:

MDSPEC2	
<u>Value</u>	<u>Description</u>
01	Emergency Medicine
02	Preventative Medicine
03	Occupational Medicine
04	Public Health/Epidemiology
05	Oncology
06	General Practice
07	Alcohol Rehab
08	Infectious Diseases

09	Geriatrics
10	Allergy
11	Dermatology
12	Cardiology
13	Pulmonary/Respiratory
14	Physical Med/Rehab
15	DO Radiology
16	Not Used
17	DO Pathology
18	DO Anesthesiology
19	DO General Practice
20	Internal Medicine
21	Endocrinology
22	Gastroenterology
23	Nephrology
24	Urology
25	Hematology
26	Psychiatry
27	Proctology
28	Rheumatology
29	DO Dermatology
30	Not Used
31	Neurology
32	Ophthalmology
33	Otolaryngology
34	Nurse Anesthetist
35	Physicians Assistant
36	Optometrist
37	Genetics
38	Registered Nurse
39	Not Used
40	Radiology
41	Not Used
42	Not Used
43	Pathology

44	Not Used
45	Anesthesiology
46	Radiation Oncology
47	Not Used
48	Not Used
49	Not Used
50	Obstetrics & Gynecology
51	Pediatrics
52	Not Used
53	Pediatric Cardiology
54	Neonatology
55	Hospital Resident (D.O.)
56	Hospital Resident (M.D.)
57	DO Oncology/Hematology
58	Pediatric Neurology
59	Pediatric Oncology/Hematology
60	General Surgery
61	Orthopaedic Surgery
62	Plastic Surgery
63	Thoracic Surgery
64	Neurological Surgery
65	Not Used
66	Not Used
67	Not Used
68	Not Used
69	Unknown
70	General Dentistry
71	Podiatry
72	Oral Surgery
73	Not Used
74	Not Used
75	Not Used
76	Not Used
77	Not Used
78	DO Gastroenterology

79	DO Cardiology
80	DO Family Practice
81	DO Emergency Medicine
82	DO Physical Med/Rehab
83	DO Internal Medicine
84	DO Urology
85	DO Proctology
86	DO Neurology
87	DO Ophthalmology
88	DO Otolaryngology
89	DO Psychiatry
90	DO Obstetrics & Gynecology
91	DO General Surgery
92	DO Orthopaedic Surgery
93	DO Plastic Surgery
94	DO Thoracic Surgery
95	DO Pediatrics
96	Psychology
97	Nurse Mid-Wife
98	Surgical Assistant
99	Family Practice

South Carolina

South Carolina reports physician specialty as the area in which the physician spends the most hours per week, as reported at license renewal. If the physician does not report hours, South Carolina assigns physician specialty as the first practice type reported by the physician.

Beginning in 2004, physicians report their specialties to South Carolina using abbreviations in the "source-specific descriptions" column of the following table. Prior to 2004, both abbreviation and numeric categories were used by physicians. South Carolina assigns specialties to three-character codes and reports the data in that format. During HCUP processing, the three-character codes supplied by the state were assigned to MDSPEC2.

In South Carolina, MDSPEC2 is coded as follows. Any other codes are undefined.

Source Value	Description
A	Allergy
AD	Administrative Medicine
ADL	Adolescent Medicine
ADM	Addiction Medicine
ADP	Addiction Psychiatry
AI	Allergy And Immunology
ALI	Allergy & Immunology/Clinical And Laboratory Immunology
AM	Aerospace Medicine
AN	Anesthesiology
APM	Pain Management (Anesthesiology)
AS	Abdominal Surgery
ATP	Anatomic Pathology
BBK	Blood Banking/Transfusion Medicine
CBG	Clinical Biochemical Genetics
CCA	Critical Care Medicine (Anesthesiology)
CCG	Clinical Cytogenetics
CCM	Critical Care Medicine (Internal Medicine)
CCP	Pediatric Critical Care Medicine
CCS	Surgical Critical Care (Surger)
CD	Cardiovascular Disease
CDS	Cardiovascular Surgery
CE	Cardiac Electrophysiology
CG	Clinical Genetics
CHN	Child Neurology
CHP	Child & Adolescent Psychiatry
CLP	Clinical Pathology
CMG	Clinical Molecular Genetics
CN	Clinical Neurophysiology
CRS	Colon & Rectal Surgery
D	Dermatology
DDL	Clinical And Laboratory Dermatological Immunology
DIA	Diabetes
DLI	Diagnostic Laboratory/Immunology

DMP	Dermatopathology
DR	Diagnostic Radiology
EM	Emergency Medicine
END	Endocrinology, Diabetes And Metabolism
ESM	Sports Medicine (Emergency Medicine)
ETX	Medical Toxicology (Emergency Medicine)
FOP	Forensic Pathology
FP	Family Practice
FPG	Geriatric Medicine (Family Practice)
FPS	Facial Plastic Surgery
FSM	Sports Medicine (Family Practice)
GE	Gastroenterology
GER	Geriatrics
GO	Gynecological Oncology
GP	General Practice
GPM	General Preventive Medicine
GS	General Surgery
GYN	Gynecology
HEM	Hematology (Internal Medicine)
HEP	Hepatology
HMP	Hematology (Pathology)
HNS	Head & Neck Surgery
HSO	Hand Surgery (Orthopedic Surgery)
HSP	Surgery of the Hand (Plastic Surgery) (D)
HSS	Surgery Of The Hand (Surgery)
ID	Infectious Disease
IG	Immunology
ILI	Clinical And Laboratory Immunology (Internal Medicine)
IM	Internal Medicine
IMG	Geriatric Medicine (Internal Medicine)
ISM	Sports Medicine (Internal Medicine)
LM	Legal Medicine
MFM	Maternal & Fetal Medicine
MG	Medical Genetics
MM	Medical Microbiology

N	Neurology
NCC	Critical Care Medicine (Neurological Surgery)
NEO	Neo Natal
NEP	Nephrology
NM	Nuclear Medicine
NP	Neuropathology
NPM	Neonatal Perinatal Medicine
NR	Nuclear Radiology
NS	Neurological Surgery
NSP	Pediatric Surgery (Neurology)
NTR	Nutrition
OAR	Adult Reconstructive Orthopedics
OBG	Obstetrics & Gynecology
OBS	Obstetrics
OCC	Critical Care Medicine (Obstetrics & Gynecology)
OM	Occupational Medicine
OMO	Musculoskeletal Oncology
ON	Medical Oncology
OP	Pediatric Orthopedics
OPH	Ophthalmology
ORS	Orthopedic Surgery
OS	Other Specialty (Physician designated a specialty other than appearing here)
OSM	Sports Medicine (Orthopedic Surgery)
OSS	Orthopedic Surgery of the Spine
OT	Otology
OTO	Otolaryngology
OTR	Orthopedic Trauma
P	Psychiatry
PA	Clinical Pharmacology
PCH	Chemical Pathology
PCP	Cytopathology
PD	Pediatrics
PDA	Pediatric Allergy
PDC	Pediatric Cardiology

PDE	Pediatric Endocrinology
PDO	Pediatric Otolaryncology
PDP	Pediatric Pulmonology
PDR	Pediatric Radiology
PDS	Pediatric Surgery
PDT	Medical Toxicology(Pediatrics)
PEM	Pediatric Emergency Medicine
PG	Pediatric Gastroenterology
PH	Public Health and General Prevention Medicine
PHO	Pediatric Hematology/Oncology
PIP	Immunopathology
PLI	Clinical And Laboratory Immunology (Pediatrics)
PM	Physical Medicine and Rehabilitation
PMD	Pain Medicine
PN	Pediatric Nephrology
PO	Pediatric Ophthalmology
PP	Pediatric Pathology
PPR	Pediatric Rheumatology
PS	Plastic Surgery
PSM	Sports Medicine (Pediatrics)
PTH	Anatomic/Clinical Pathology
PTX	Medical Toxicology (Preventive Medicine)
PUD	Pulmonary Diseases
PYA	Psychoanalysis
PYG	Geriatric Psychiatry
R	Radiology
REN	Reproductive Endocrinology
RHU	Rheumatology
RIP	Radioisotopic Pathology
RNR	Neuroradiology
RO	Radiation Oncology
RP	Radiological Physics
SH	Student Health
TR	Therapeutic Radiation
TRS	Traumatic Surgery

TS	Thoracic Surgery
U	Urology
UM	Undersea Medicine
UP	Pediatric Urology
VIR	Vascular And Interventional Radiology
VS	General Vascular Surgery

South Carolina data do not separately classify some physician specialties. No documentation was available describing which physician specialties were used for:

- U.S. Air Force (AF)
- Pathology, Pediatric Pathology (PP)
- U.S. Navy (USN)
- U.S. Army (USA)
- Osteopathy (OST)
- U.S. Public Health Service (PHS)

Wisconsin

In Wisconsin, MDSPEC2 is coded as follows:

MDSPEC2	
<u>Value</u>	<u>Description</u>
001	Allergy- Immunology
002	Anesthesiology
003	Dermatology
004	Internal Medicine
005	IM - Cardiology
006	IM - Gastroenterology
007	Hematology
008	General Practice
009	Preventative Medicine
010	Neurology
011	Surgery - Neurological
012	Obstetrics & Gynecology
013	Ophthalmology
014	Orthopedic Surgery
015	Otorhinolaryngology - ENT

016	Pathology
017	Pathology - Clinical
018	Pediatrics
019	Physical Medicine & Rehab
020	Psychiatry - General
021	Psychiatry - Child
022	Public Health
023	Nuclear Medicine
024	Retired
025	Surgery - General
026	Surgery - Plastic
027	Surgery - Thoracic
028	Urology
029	Geriatrics
030	Occupational Medicine
031	Emergency Medicine
032	Aviation Medicine
033	Aerospace Medicine
034	Research Medicine
036	Proctology
037	Academic Medicine
038	Oncology
039	Institutional Medicine
040	Nephrology
041	Family Practice
043	Radiology - Diagnostic
044	Surgery - Cardiovascular
045	IM - Pulmonary Medicine
046	Hebiatrics
047	Immunology - Infectious Diseases
048	Pharmacology - Clinical
049	Alcoholism - Chemical Dependency
051	Neurophysiology
052	School Physician
053	Radiology

054	Surgery - Colon & Rectal
056	Endocrinology)
057	Rheumatology
058	Surgery - Maxillofacial
059	Surgery - Perihpheral Vascular
060	Pediatrics - Other
061	Genetics
062	Perinatology
063	Neonatology
064	Surgery - Hand
065	Hyperbaric Medicine
066	Pain Management
067	Otolaryngology
068	Radiology - Nuclear Medicine
069	Radiology - Ultra Sound
070	Radiation Oncology
071	Administrative Medicine
072	Pathology - Surgical Anatomic
073	Pathology - Forensic
098	Sleep Disorders Medicine
099	Other - Not Listed

MOMNUM_R - Mother's number (re-identified)

General Notes

MOMNUM_R is specific to the mother of the baby in a particular hospital. MOMNUM_R does not allow linkage of persons across institutions.

Because of a change in the algorithm for creating person identifiers, mothers cannot be tracked from before 2003 to after 2003. In HCUP data prior to 2003, a synthetic mother's medical record number (MOMNUM_S), created using fixed-key encryption, was available. Starting in data year 2003, a reidentification number (MOMNUM_R) was used. MOMNUM_R includes an arbitrarily chosen, identifying number that is unique to the mother's medical record identifier provided to HCUP.

Uniform Values

Variable	Description	Value	Value Description
MOMNUM_R	Mother's number (re-identified)	9(n)	Mother's number
		.	Missing

State Specific Notes

Michigan

MOMNUM_R contains the medical record number of the mother for newborn birth and infant identification. The mother's record will contain her medical record number in the HCUP variable MRN_R. Michigan documentation indicates that use of this field is optional. Not all the hospitals that have obstetrics units provide the data.

New Jersey

MOMNUM_R contains the synthetic medical record number of the mother on newborn discharges. The mother's record will contain her synthetic medical record number in the HCUP variable MRN_R.

MOMNUM_S - Synthetic mother's number

General Notes

Beginning in 2003, this data element is called MOMNUM_R.

The synthetic mother's number (MOMNUM_S) contains a fixed-key (one-to-one) encryption of the supplied mother's number (MOMNUM), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,; '*@" are retained in the encrypted value but not in the same location.
- Leading zeros are retained. If the data source codes the same number inconsistently (sometimes with leading zeros and sometimes with leading blanks), the HCUP numbers are different.

If null characters are found, they are replaced by blanks before the number is encrypted.

Uniform Values

Variable	Description	Value	Value Description
MOMNUM_S	Synthetic mother's number	17(a)	Synthetic mother's number
		Blank	Missing

State Specific Notes

New Jersey

MOMNUM_S contains the synthetic medical record number of the mother on newborn discharges. The mother's record will contain her synthetic medical record number in the HCUP variable MRN_S.

MRN_R - Medical record number (re-identified)

General Notes

MRN_R is specific to patients (persons) so that multiple admissions by the same patient to a single institution can be linked. MRN_R does not allow linkage of persons across institutions.

Because of a change in the algorithm for creating person identifiers, patients cannot be tracked from before 2003 to after 2003. In HCUP data prior to 2003, a synthetic medical record number (MRN_S), created using fixed-key encryption, was available. Starting in data year 2003, a reidentification number (MRN_R) was used. MRN_R includes an arbitrarily chosen, identifying number that is unique to the medical record identifier provided to HCUP.

MRN_R should not be used for analyses without first consulting summary statistics on:

Frequencies of the number of discharges per nonmissing MRN_R, by hospital, and

Hospital-level counts of the number of unique nonmissing MRN_Rs, the number of discharges associated with these MRN_Rs, the ratio of these two numbers (discharges/person), and the number of discharges without a MRN_R.

Uniform Values

Variable	Description	Value	Value Description
MRN_R	Medical record number (re-identified)	9(n)	Medical record number
		.	Missing

State Specific Notes

Iowa

Iowa reports encrypted medical record numbers.

Maryland

The format of encrypted medical record number (MRN_R) is inconsistent across years.

- Prior to 1993, the medical record number was supplied with no padding of the values.
- Beginning in 1993, the supplied medical record number included padding that was retained in the encrypted values.

Maine

Caution should be used when using MRN_S to track patients back to 1999. The values supplied by the data source in the 1999 data appear different from the values supplied beginning in 2000.

Maine provides encrypted medical record numbers. During HCUP processing, medical record numbers were re-encrypted (MRN_R).

MRN_S - Synthetic medical record number

General Notes

Beginning in 2003, this data element is called MRN_R.

MRN_S is specific to patients (persons) so that multiple admissions by the same patient to a single institution can be linked. MRN_S does not allow linkage of persons across institutions.

MRN_S should not be used for analyses without first consulting summary statistics on:

- Frequencies of the number of discharges per nonmissing MRN_S, by hospital, and
- Hospital-level counts of the number of unique nonmissing MRN_Ss, the number of discharges associated with these MRN_Ss, the ratio of these two numbers (discharges/person), and the number of discharges without a MRN_S.

MRN_S contains a fixed-key (one-to-one) encryption of the supplied medical record number (MRN), according to the following rules:

- All alphanumeric digits are used in the encryption.
- All symbols such as ".,:; '*@" are retained in the encrypted value but not in the same location.
- Leading zeros are retained. If a hospital codes the same medical record number inconsistently (sometimes with leading zeros and sometimes with leading blanks), the HCUP medical record numbers are different.
- When the MRN in the ambulatory surgery data and the inpatient data are the same, the synthetic identifier, MRN_S is the same.

Beginning in the 1993 data, the medical record numbers were checked for null characters. If null characters were found, they were replaced by blanks before the number was encrypted. Since this conversion was not done in prior years of HCUP data, the encrypted medical record numbers from 1993 on may not match those in earlier years. However, null characters are rarely included.

Uniform Values			
Variable	Description	Value	Value Description
MRN_S	Synthetic medical record number	17(a)	Synthetic medical record number
		Blank	Missing

State Specific Notes

Iowa

Iowa reports encrypted medical record numbers.

Maine

Caution should be used when using MRN_S to track patients back to 1999. The values supplied by the data source in the 1999 data appear different from the values supplied beginning in 2000.

Maine provides encrypted medical record numbers. During HCUP processing, medical record numbers were re-encrypted (MRN_S).

Maryland

The format of encrypted medical record number (MRN_S) is inconsistent across years.

- Prior to 1993, the medical record number was supplied with no padding of the values.
- Beginning in 1993, the supplied medical record number included padding that was retained in the encrypted values.